CITY AND COUNTY OF BRISTOL

THE
HEALTH OF BRISTOL
IN
1953

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THE HEALTH OF BRISTOL IN 1953

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I. INTRODUCTION

My Lord Mayor, Ladies and Gentlemen,

I have pleasure in presenting my 24th Annual Report on the health conditions of the City of Bristol.

On this occasion I do not intend to draw attention to any particular matter in this report. The publication is a co-operative effort by the senior officers of the department, and sectional and special reports appear under their names. These reports have been ably collated and edited by my Personal Assistant, Mr. D. M. Evans.

Mr. Room, in his report, has made reference to the sad loss sustained by the department through the death of Mr. F. J. W. Webb, the Senior Clerk in the Staffing and Wages Section, and I should like to add a personal tribute to his valuable work.

I should also like to record my appreciation of the services of Mr. C. F. Martin the reception clerk at the Central Clinic who died in June. He had been with the department since 1944.

Once again I wish to express gratitude to the staff for their loyal co-operation, to my deputy, Dr. Wofinden, to my senior medical officers and to Mr. Room, chief administrative assistant, for their loyal and enthusiastic assistance.

Our best thanks are also due to the Chairmen of the Health, Education, Housing, Welfare and other committees of the Corporation for their encouragement and consideration. Our thanks are also due to the Town Clerk and the Chief Officers for their ever ready help and co-operation.

Your obedient servant,

R. H. PARRY,
Medical Officer of Health.

Central Health Clinic,
Bristol 2.

2. SUMMARY OF VITAL STATISTICS

Population

The estimated total population (mid-year) at 444,200 shows an increase of 300 over the previous year. Total population includes H.M. Forces stationed in the area. The rates for 1953 are based upon the Registrar-General's estimate of the total population at mid-1953.

	1952	**1953**
Estimated total population (mid-year)	443,900	**444,200**
Marriages	3,585	**3,460**
Rate per 1,000 population	16·15	**15.58**
Births (Area comparability factor 1953—0·99) ...	6,760	**6,945**
Rate per 1,000 population	15·23	**15.63**
Rate per 1,000 population—adjusted ...	15·08	**15.47**
Stillbirths	144	**126**
Rate per 1,000 total births	20·86	**17.82**
Deaths (Area comparability factor 1953—0·97)...	4,971	**5,146**
Rate per 1,000 population—crude	11·20	**11.58**
Rate per 1,000 population—adjusted ...	10·86	**11.23**
Natural increase (per 1,000 population)	4·03	**4.05**
Deaths under one year	145	**152**
Rate per 1,000 live births	21.45	**21.89**
Deaths under one month	102	**105**
Rate per 1,000 live births	15·09	**15.12**
Deaths from puerperal causes	7	**7**
Rate per 1,000 total births	1·01	**0.99**

Marriages (Rate : 15.58 per 1,000 population)

	No.	Rate per 1,000 Population
1953	**3,460**	**15.58**
1952	3,585	16·15
1951	3,506	15·88
1950	3,512	15·87
1949	3,783	17·20
1948	3,786	17·41
1947	4,033	18·82

Births (Rate : 15.63 per 1,000 population)

Births	YEAR							
	1946	1947	1948	1949	1950	1951	1952	**1953**
Total registered live births ..	8,929	10,082	8,485	8,326	7,833	7,536	7,635	**7,719**
1953 compared with other years (plus or minus)	-1,294	-2,447	-350	-691	-198	+99	+84	—
Non-resident births in Bristol (included above)	1,105	1,026	889	1,005	956	897	988	**1,025**
Births—Bristol citizens only ..	7,824	9,056	7,596	7,321	6,877	6,639	6,647	**6,694**
Births to Bristol citizens outside City boundary	217	87	235	185	219	233	113	**251**
R.G.'s corrected figure—registered live births—Bristol	8,041	9,143	7,831	7,506	7,096	6,872	6,760	**6,945**
Birth rate per 1,000 population : (1946–48 Civ. Pop.)	19.28	21.33	18.00	—	—	—	—	—
(1949–53—Total Pop.)	—	—	—	17.07	16.03	15.56	15.23	**15.63**

Illegitimacy (Rate : 44 per 1,000 live births)

	1952	**1953**
Total illegitimate live births registered in Bristol	378	**391**
As percentage of total live births	4·9%	**5.1%**
Non-citizen illegitimate births in Bristol ...	107	**115**
Non-citizen percentage of illegitimate births ...	28·3%	**29.4%**
R.G.'s corrected total for Bristol—illegitimate live births	302	**309**

Stillbirths (R.G.'s corrected number, 126. Rate : 17.82 per 1,000 total births).

The stillbirth rate for 1953 at 17.82 per 1,000 total births, shows a further decline. The figures for 1952 and 1951 were 20.86 and 22.06 per 1,000 total births respectively.

There were 126 stillbirths registered in 1953 as compared with 144 in 1952 after correction for transfers. The gross total was 148 but this included 28 outside-city cases, and there were six inward transfers of city residents.

Deaths (Rate : (Crude) 11.58 per 1,000 population.
(Adjusted) 11.23 per 1,000 population.
(Area comparability factor 0.97).

	1953	1952	Increase or decrease on 1952	Rate per 1,000 population, **1953**
Total number of deaths in city ...	**5,547**	5,489	+58	**12.49**
Non-citizen deaths included ...	**608**	737	− 129	
Total deaths—Bristol citizens only (as corrected by R.G.)	**5,146**	4,971	+175	**11.58** (crude) **11.23** (adjusted)

Natural Increase Rate : 4.05 per 1,000 population).

	1952	**1953**
Bristol Births ...	6,760	**6,945**
Bristol Deaths ...	4,971	**5,146**
Natural Increase ...	+1,789	**+1,799**

Infant Mortality (Total infant deaths 152). (Rate : 22 per 1,000 live births).

During 1953, 214 infants (including 70 non-Bristol infants) died within one year of birth—12 less than in the previous year (226 including 84 non-Bristol). After correction for transfers, the Registrar-General's figure is 152 compared with 145 and an infant mortality rate of 21 per 1,000 live births in 1952. The 1951 infant mortality rate of 20 per 1,000 live births was the lowest ever recorded for Bristol.

	1953	1952	1951	1950	1949	1948	1947
Legitimate infant mortality rate per 1,000 legitimate live births ...	**22**	21	20	23	25	24	29
Illegitimate infant mortality rate per 1,000 illegitimate live births ...	**13**	33	25	29	34	33	25

Neo-Natal Deaths (105). (Rate : 15.12 per 1,000 live births).

Local figures for this age group show that the registered number of babies dying in Bristol during the first month of life was 151 compared with 173 in 1952. After correction by the Registrar-General for residence this figure becomes 105 for Bristol compared with 102 in 1952. This age group, after correction, represents 69% of the number of infants under one year of age (70% in 1952).

Of the total neo-natal deaths in 1953 (uncorrected for transfers), 70 (46% approximately) occurred on the first day of life and 65 (43% approximately) from one day to within the first week of life. In 1952 these figures were respectively—39% and 42%. In 1953, after correction for transfers, there were 43 neo-natal deaths on the first day and 48 in the one day to one week age group.

In 1953, of the corrected 105 neo-natal deaths 3 were illegitimate.

Legitimate neo-natal mortality—15.2 per 1,000 legitimate live births.

Illegitimate neo-natal mortality—12.9 per 1,000 illegitimate live births.

Maternal Mortality (7). (Rate : 0.989 per 1,000 total births).

There were nine maternal deaths registered in the city during 1953. Of these, seven were Bristol residents (as listed below).

1953—Causes:

Eclampsia	1	7
Abortion due to sepsis	2	
Post-partum haemorrhage	1	
Embolism	1	
Pul. Embolism following nephrectomy ...	1	
Septic endometritis and toxaemia of pregnancy	1	

VITAL STATISTICS

TABLE I. Supplied by the Registrar-General

Population, marriages, births, deaths, natural increase, infant mortality—for Calendar Year 1953 and previous six years—BRISTOL

	1953	1952	1951	1950	1949	1948	1947
Estimated population (mid-year) .. Civ. ..	—	—	—	—	439,740	435,000	428,600
Total ..	**444,200**	443,900	†442,700	442,600	—	—	—
* Constructed	—	—	441,650	—	—	—	—
Marriages							
Number	**3,480**	3,585	3,506	3,512	3,783	3,786	4,033
Rate per 1,000 pop. Civ. ..	—	—	—	—	17.21	17.41	18.82
Total ..	**15.58**	16.15	15.84	15.87	17.20	—	—
Constructed	—	—	15.88	—	—	—	—
Births :							
Legitimate—males	**3,365**	3,249	3,335	3,506	3,687	3,730	4,430
females	**3,271**	3,209	3,255	3,280	3,440	3,672	4,239
Illegitimate—males	**141**	156	144	143	204	225	241
females	**168**	146	138	167	175	204	232
Total	**6,945**	6,760	6,872	7,096	7,506	7,831	9,142
Rate per 1,000 population	**15.63**	15.23	15.52	16.03	17.07	18.00	21.33
Rate per 1,000 pop. (constructed) ..	—	—	15.56	—	—	—	—
Stillbirths :							
Legitimate—males	**64**	77	72	80	77	75	100
females	**55**	61	70	62	72	89	94
Illegitimate—males	**4**	4	8	6	3	4	11
females	**3**	2	5	10	5	7	4
Total	**128**	144	155	158	157	175	209
Rate per 1,000 total births	**18**	21	22	22	20	22	22
Deaths :							
Males	**2,591**	2,504	2,783	2,543	2,481	2,308	2,563
Females	**2,555**	2,467	2,840	2,539	2,403	2,268	2,551
Total	**5,148**	4,971	5,623	5,082	4,884	4,576	5,114
Rate per 1,000 population	**11.58**	11.20	12.70	11.48	11.11	10.52	11.93
Rate per 1,000 pop. (constructed) ..	—	—	12.73	—	—	—	—
Natural Increase per 1,000 population	**4.05**	4.03	2.82	4.55	5.96	7.48	9.39
,, ,, ,, (constructed)	—	—	2.83	—	—	—	—
Deaths under one year :							
Legitimate	**148**	135	133	156	179	178	255
Rate per 1,000 legitimate live births	**22**	21	20	23	25	24	29
Illegitimate	**4**	10	7	9	13	14	12
Rate per 1,000 illegitimate live births	**13**	33	25	29	34	33	25
Total deaths	**152**	145	140	165	192	192	267
Rate per 1,000 live births	**22**	21	20	23	26	25	29
Deaths under one month :							
Total deaths	**105**	102	92	112	133	119	160
Rate per 1,000 live births	**15**	15	13	16	18	15	18
Diarrhoea and enteritis (under two years) :							
Deaths	**3**	2	4	2	5	3	16
Rate per 1,000 live births	**0.43**	0.30	0.58	0.28	0.66	0.38	1.7
Maternal mortality :							
Deaths from :—							
Sepsis of pregnancy, childbirth and the puerperium	**1**	—	—	1	—	—	—
Abortion with toxaemia	**1**	—	—	—			
Other toxaemias of pregnancy and the puerperium	—	4	1	3			
Haemorrhage of pregnancy and childbirth	**1**	—	1	—			
Abortion without mention of sepsis or toxaemia	—	1	—	1			
Abortion with sepsis	**2**	1	1	—			
Other complications of pregnancy, childbirth and the puerperium ..	**2**	1	4	2			
Total deaths	**7**	7	7	7	8	6	11
Rate per 1,000 total births	**0.989**	1.01	0.996	0.96	1.04	0.74	1.17

† Relates to the area as constituted at midsummer (subsequent to boundary changes).

* The Registrar-General's constructed population for use in the computation of rates for the year which combine " before change " and " after change " figures.

TABLE 2. Supplied by the Registrar-General

Birth-rates, death-rates, analysis of mortality, maternal mortality and case-rates for certain infectious diseases in the year 1953

(Provisional figures based on quarterly returns)

	Bristol	England and Wales	160 County Boroughs and great towns including London	160 Smaller towns (resident populations 25,000 to 50,000 at 1951 Census)	London Administrative County
	Rates per 1,000 Home population.				
Births :					
Live	15.63	15.5	17.0	15.7	17.5
Still	17.82 (a) 0.28	22.4 (a) 0.35	24.8 (a) 0.43	21.4 (a) 0.34	21.0 (a) 0.38
Deaths :					
ALL CAUSES (Crude) ..	11.58	11.4	12.2	11.3	12.5
(Adjusted)..	11.23				
Typhoid & paratyphoid fevers	—	0.00	0.00	—	—
Whooping cough	0.00	0.01	0.01	0.00	0.00
Diphtheria	—	0.00	0.00	0.00	—
Tuberculosis	0.24	0.20	0.24	0.19	0.24
Influenza	0.16	0.16	0.15	0.17	0.15
Smallpox	—	0.00	0.00	0.00	—
Acute poliomyelitis (including polioencephalitis) ..	0.01	0.01	0.01	0.01	0.01
Pneumonia	0.64	0.55	0.59	0.52	0.64
Notifications (corrected) :					
Typhoid fever	0.00	0.00	0.00	0.00	0.01
Paratyphoid	0.01	0.01	0.01	0.01	0.01
Meningococcal infection ..	0.05	0.03	0.04	0.03	0.03
Scarlet fever	1.55	1.39	1.50	1.44	1.02
Whooping cough	4.49	3.58	3.72	3.38	3.30
Diphtheria	—	0.01	0.01	0.01	0.00
Erysipelas	0.16	0.14	0.14	0.13	0.12
Smallpox	—	0.00	0.00	0.00	—
Measles	16.82	12.36	11.27	12.32	8.09
Pneumonia	1.38	0.84	0.92	0.76	0.73
Acute poliomyelitis (including polioencephalitis)—					
Paralytic	0.13	0.07	0.06	0.06	0.07
Non-paralytic	0.02	0.04	0.03	0.04	0.03
Food poisoning	0.40	0.24	0.25	0.24	0.38
Puerperal pyrexia	23.90 (a)	18.23 (a)	24.33 (a)	12.46 (a)	28.61 (a)
	Rates per 1,000 live births.				
Deaths under one year of age	21.89	26.8 (b)	30.8	24.3	24.8
Deaths from diarrhoea and enteritis (under 2 yrs. of age)	0.43	1.1	1.3	0.9	1.1

Maternal Mortality :	Rate per 1,000 total births (i.e., live and still).				
	Deaths No. Bristol	Deaths Rate Bristol	Deaths No. Eng. & Wales	Deaths Rate Eng. & Wales	Rate per million women aged 15 to 44 (England and Wales)
Sepsis of pregnancy, childbirth and the puerperium	1	0.14	68	0.10	
Abortion with toxaemia ..	1	0.14	7	0.01	.. 1
Other tox. of pregnancy and puerperium	—	—	166	0.24	
Haemorrhage of pregnancy and childbirth	1	0.14	90	0.13	
Abortion without mention of sepsis or toxaemia ..	—	—	30	0.04	.. 3
Abortion with sepsis ..	2	0.28	39	0.06	.. 4
Other complications of pregnancy, childbirth and the puerperium	2	0.28	125	0.18	

(a) = per 1,000 TOTAL births (live and still).

(b) = per 1,000 related live births.

TABLE 3. Compiled from figures supplied by the Registrar-General

Total deaths by cause and age during Calendar Year 1953
BRISTOL

DISEASE	Sex	All Ages	0–1	1–5	5–15	15–45	45–65	65 plus
All Causes	M	2,591	81	16	13	170	721	1,590
	F	2,555	71	12	14	110	439	1,909
1. T.B. Respiratory	M	61	—	—	—	24	28	9
	F	32	—	—	—	16	9	7
2. T.B. Other	M	6	—	3	—	2	—	1
	F	6	—	1	1	1	2	1
3. Syphilitic Disease	M	8	—	—	—	—	3	5
	F	6	—	—	—	—	1	5
4. Diphtheria	M	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—
5. Whooping Cough	M	1	1	—	—	—	—	—
	F	1	—	1	—	—	—	—
6. Meningococcal Infection	M	1	1	—	—	—	—	—
	F	—	—	—	—	—	—	—
7. Acute Poliomyelitis	M	5	—	1	—	3	1	—
	F	—	—	—	—	—	—	—
8. Measles	M	1	—	1	—	—	—	—
	F	1	—	1	—	—	—	—
9. Other Infective and Parasitic Disease	M	8	—	2	—	2	1	3
	F	6	—	—	—	2	1	3
10. Malignant Neoplasm of Stomach	M	69	—	—	—	2	28	39
	F	60	—	—	—	—	20	40
11. ,, ,, ,, Lung, Bronchus	M	131	—	—	—	7	77	47
	F	23	—	—	—	1	13	9
12. ,, ,, ,, Breast	M	—	—	—	—	—	—	—
	F	75	—	—	—	6	32	37
13. ,, ,, ,, Uterus	F	35	—	—	—	3	16	16
14. ,, Other & Lymp. Neoplasms	M	224	—	1	—	19	64	140
	F	205	—	—	1	12	68	124
15. Leukaemia, Aleukaemia	M	7	—	1	1	2	3	—
	F	9	—	—	3	2	2	2
16. Diabetes	M	10	—	—	—	1	1	8
	F	24	—	—	—	1	3	20
17. Vascular Lesions of Nervous System	M	292	—	—	—	6	50	236
	F	379	—	—	—	2	51	326
18. Coronary Disease, Angina	M	415	—	—	—	11	166	238
	F	230	—	—	—	1	34	195
19. Hypertension with Heart Disease	M	123	—	—	—	4	31	88
	F	113	—	—	—	3	15	95
20. Other Heart Disease	M	308	—	—	—	15	41	252
	F	514	—	—	1	13	53	447
21. Other Circulatory Disease	M	138	—	—	—	4	19	115
	F	193	—	—	—	2	16	175
22. Influenza	M	24	—	—	—	3	6	15
	F	48	1	—	—	3	10	34
23. Pneumonia (including Pneumonia of Newborn)	M	136	16	1	1	4	26	88
	F	148	15	2	2	1	19	109
24. Bronchitis	M	156	—	—	—	4	38	114
	F	96	—	1	—	1	7	87
25. Other Diseases of Respiratory System	M	59	—	1	—	4	33	21
	F	21	—	—	—	—	11	10
26. Ulcer of Stomach and Duodenum	M	39	—	—	—	2	18	19
	F	12	—	—	—	—	2	10
27. Gastritis, Enteritis and Diarrhoea	M	11	2	—	—	1	3	5
	F	13	—	—	—	1	3	9
28. Nephritis and Nephrosis	M	30	—	—	—	7	10	13
	F	17	—	—	—	1	3	13
29. Hyperplasia of Prostate	M	30	—	—	—	—	1	29
30. Pregnancy, Childbirth, Abortion	F	7	—	—	—	7	—	—
31. Congenital Malformations	M	22	17	—	2	1	2	—
	F	27	19	3	—	2	1	2
32. Other Defined and Ill-defined Diseases	M	182	43	3	3	15	42	76
	F	178	36	2	3	17	30	90
33. Motor Vehicle Accidents	M	28	—	2	4	7	3	12
	F	11	—	1	2	1	3	4
34. All other Accidents	M	37	1	—	2	10	10	14
	F	41	—	—	1	2	6	32
35. Suicide	M	27	—	—	—	8	16	3
	F	24	—	—	—	9	8	7
36. Homicide and Operations of War	M	2	—	—	—	2	—	—
	F	—	—	—	—	—	—	—

TABLE 4. Compiled from figures supplied by Registrar-General

PRINCIPAL CAUSES OF DEATH DURING CALENDAR YEAR 1953—BRISTOL

Death Rate per 1,000 Population	Disease	No. Deaths 1953	Per cent of all Deaths
·209	1. T.B.Respiratory	93	1·81
·027	2. T.B., Other	12	·23
·032	3. Syphilitic Disease	14	·27
—	4. Diphtheria	—	—
·004	5. Whooping Cough	2	·04
·002	6. Meningococcal Infection	1	·02
·011	7. Acute Poliomyelitis	5	·10
·004	8. Measles...	2	·04
·032	9. Other Infective and Parasitic Disease	14	·27
·290	10. Malignant Neoplasm of Stomach ...	129	2.51
·347	11. ,, ,, ,, Lung, Bronchus	154	2·99
·169	12. ,, ,, ,, Breast ...	75	1·46
·079	13. ,, ,, ,, Uterus ...	35	·68
·966	14. ,, Other & Lymp. Neoplasms	429	8·34
·036	15. Leukaemia, Aleukaemia	16	·31
·077	16. Diabetes	34	·66
1·511	17. Vascular Lesions of Nervous System	671	13·04
1·452	18. Coronary Disease, Angina	645	12·53
·531	19. Hypertension with Heart Disease ...	236	4·59
1·851	20. Other Heart Disease	822	15·97
·745	21. Other Circulatory Disease	331	6·43
·162	22. Influenza	72	1·40
·639	23. Pneumonia (incl.Pneum. of Newborn)	284	5·52
·567	24. Bronchitis	252	4·90
·180	25. Other Diseases of Respiratory System	80	1·55
·115	26. Ulcer of Stomach and Duodenum ...	51	·99
·054	27. Gastritis, Enteritis and Diarrhoea ...	24	·47
·106	28. Nephritis and Nephrosis	47	·91
·068	29. Hyperplasia of Prostate	30	·58
·016	30. Pregnancy, Childbirth, Abortion ...	7	·14
·110	31. Congenital Malformations	49	·95
·810	32. Other Defined and Ill-defined Diseases	360	7·00
·088	33. Motor Vehicle Accidents	39	·76
·176	34. All other Accidents	78	1·52
·115	35. Suicide	51	·99
·004	36. Homicide and Operations of War ...	2	·04
11·58	All Causes	5,146	

Table showing Population, Birth-Rates, Death Rates, Zymotic Death-Rates, Infant and Maternal Mortality Rates of the 20 large towns of England and Wales for 1953.

	Birmingham	Bradford	Bristol	Cardiff	Coventry	Croydon	Kingston upon Hull	Leeds	Leicester	Liverpool	Manchester	Newcastle upon Tyne	Nottingham	Plymouth	Portsmouth	Salford	Sheffield	Southampton	Stoke-on-Trent	Sunderland
R.G.'s estimated population	1,118,500	286,600	**444,200**	246,600	203,000	249,800	299,400	505,500	286,500	789,700	701,800	289,700	311,500	221,400	245,800	173,900	507,600	177,100	273,700	181,550
Comparability factor—																				
(a) births	0.96	1.01	**0.99**	0.97	0.94	0.99	1.00	0.96	0.98	0.96	0.95	0.97	0.97	1.05	1.05	0.95	0.99	0.99	0.96	1.01
(b) deaths	1.12	0.97	**0.97**	1.06	1.26	0.90	1.14	1.07	1.01	1.19	1.11	1.09	1.08	1.06	1.04	1.14	1.07	1.02	1.21	1.13
Crude birth rate per 1,000 population	16.60	15.9	**15.63**	17.93	10.1	13.8	19.1	15.7	16.04	20.3	17.41	17.06	16.64	16.45	15.21	17.05	13.90	16.01	16.45	19.5
Birth rate as adjusted by factor	15.94	16.0	**15.47**	17.39	15.2	13.7	19.1	15.1	15.72	19.5	16.54	16.55	16.14	17.27	15.97	16.20	13.76	15.85	15.79	19.7
Crude death rate per 1,000 population	10.63	14.2	**11.58**	11.25	8.5	11.6	10.9	11.7	11.19	10.7	12.31	10.00	11.01	11.03	11.59	12.32	11.90	10.86	10.95	10.6
Death rate as adjusted by factor	11.91	13.8	**11.23**	11.93	10.7	10.5	12.4	12.5	11.30	12.7	13.66	11.88	11.89	11.69	12.05	14.04	12.73	11.08	13.25	11.98
Infantile mortality rate per 1,000 live births ..	26.12	37.0	**21.89**	26.02	33.4	21.0	35.2	32.90	24.80	35.5	30.53	26.82	27.00	26.90	23.80	32.05	25.66	33.16	28.0	37.9
Neonatal mortality rate per 1,000 live births ..	18.04	24.5	**15.12**	15.82	24.7	14.0	21.7	22.90	15.44	21.8	20.87	19.91	16.39	17.02	14.98	22.95	16.30	22.22	23.0	18.9
Stillbirth rate per 1,000 total births ..	23.46	19.5	**17.82**	21.90	19.8	23.3	27.3	20.62	27.09	24.0	28.24	23.4	20.22	20.17	28.58	30.11	25.15	26.78	25.0	21.0
Maternal mortality rate per 1,000 total births ..	0.58	0.21	**0.99**	0.00	0.47	0.85	1.36	0.62	0.85	0.30	0.80	0.593	0.77	1.88	0.52	0.33	0.55	1.37	0.0	0.55
Tuberculosis rate per 1,000 population—																				
(a) Primary notifications—																				
Respiratory ..	1.11	1.06	**1.135**	1.334	1.7	0.76	1.16	0.83	1.24	1.75	1.06	1.643	1.67	1.03	1.06	1.403	1.095	1.479	1.085	1.25
Non-respiratory	0.13	0.19	**0.101**	0.102	0.14	0.08	0.14	0.18	0.126	0.16	0.13	0.235	0.07	0.16	0.98	0.184	0.120	0.068	0.084	0.13
(b) Deaths—																				
Respiratory ..	0.24	0.14	**0.209**	0.29	0.15	0.12	0.25	0.22	0.244	0.33	0.28	0.280	0.27	0.20	0.19	0.288	0.193	0.327	0.343	0.26
Non-respiratory	0.01	0.03	**0.027**	0.028	0.02	0.00	0.04	0.02	0.021	0.03	0.03	0.041	0.02	0.02	0.02	0.023	0.018	0.017	0.029	0.01
*DEATH RATES PER 1,000 POPULATION FROM :—																				
Cancer (all forms including Leukaemia and Aleukaemia)	2.00	2.3	**1.887**	1.97	1.66	2.16	1.84	1.91	1.864	1.97	2.16	2.095	1.86	1.89	1.97	2.28	2.126	2.230	2.032	2.00
Typhoid and Paratyphoid Fever	0.00	—	**—**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0037	0.00
Meningococcal Infections	0.01	0.007	**0.002**	0.008	—	0.00	—	0.00	0.014	0.01	0.01	0.003	0.01	0.02	0.01	0.011	0.006	0.006	0.0073	0.02
Scarlet Fever	—	—	**—**	0.004	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00
Whooping Cough ..	0.01	0.007	**0.004**	0.008	0.015	—	0.01	0.00	0.007	0.005	0.01	0.003	0.01	0.01	0.01	—	0.008	0.017	—	0.00
Diphtheria	—	—	**—**	—	—	—	—	—	—	0.002	0.00	—	—	—	—	—	—	—	—	0.00
Influenza	0.15	0.132	**0.162**	0.11	0.095	0.32	0.15	0.11	0.101	0.04	0.15	0.058	0.14	0.11	0.23	0.103	0.083	0.152	0.084	0.07
Measles	0.02	—	**0.004**	0.01	—	0.00	0.00	0.00	—	0.006	0.00	0.007	0.00	—	0.00	0.011	—	0.006	0.0037	0.01
Acute Poliomyelitis and Encephalitis	0.00	0.01	**0.011**	0.004	0.004	0.00	0.01	0.00	0.0035	0.0038	—	—	0.01	0.02	0.01	0.006	0.006	0.006	—	0.01
Acute Infectious Encephalitis	0.01	—	**0.002**	—	—	—	—	0.00	0.0035	0.001	0.00	0.007	—	—	—	—	—	—	—	0.00
Smallpox	—	—	**—**	—	—	—	—	0.00	—	—	—	—	—	—	—	—	—	—	—	0.00
Diarrhoea (under 2 years)	0.02	0.007	**0.007**	0.036	0.019	0.016	0.02	0.03	0.014	0.03	0.01	0.014	0.02	0.00	0.02	0.029	0.022	0.040	0.011	0.03
Diarrhoea (under 2 years) per 1,000 live births ..	1.08	0.438	**0.43**	2.03	1.18	1.16	1.2	1.64	0.870	1.7	0.74	0.813	1.35	0.54	1.60	1.60	1.559	2.469	0.666	1.7

* Where no deaths have occurred at all a " dash " is inserted.

Where the number of deaths is too small to express as a rate, the figures 0.00 are inserted.

TABLE 5. Deaths (corrected for transfers) registered within the period (Local figures)

Code No.		1952		1953	
		TOTAL	Including	TOTAL	Including
001–008	T.B. of respiratory system	93		92	
010–019	T.B. other	12		13	
020–029	Syphilis and its sequelae	8		13	
030–039	Gonococcal infection and other V.D.	—		—	
040–049	Infectious disease in intestinal tract	—		—	
050–064	Other bacterial diseases	3		6	
070–074	Spirochaetal diseases (except syphilis)	—		—	
080–096	Disease attributed to viruses	5		12	
100–108	Typhus and other rickettsial diseases	—		—	
110–117	Malaria	—		—	
120–138	Other infective and parasitic diseases	—		—	
140–148	Malignant neoplasm of buccal cavity and pharynx..	12		16	
150–159	Malignant neoplasm digestive organs and peritoneum	375		356	
151	Malignant neoplasm stomach		146		128
153	Malignant neoplasm large intestine (except rectum)		79		94
154	Malignant neoplasm rectum		58		50
160–165	Malignant neoplasm respiratory system	164		168	
170–181	Malignant neoplasm breast & genito-urinary system	216		206	
170	Malignant neoplasm breast		82		75
171/4	Malignant neoplasm uterus		43		34
175	Malignant neoplasm ovary, fallopian tube and broad ligament		16		24
177	Malignant neoplasm prostate		37		32
180/1	Malignant neoplasm kidney, bladder and other urinary organs		26		30
190–199	Malignant neoplasm other and unspecified sites ..	50		50	
200–205	Neoplasms of lymphatic & haematopoitetic tissues	39		35	
210–229	Benign neoplasm	10		10	
230–239	Neoplasm of unspecified nature	11		13	
240–245	Allergic disorders	27		23	
250–254	Diseases of thyroid gland	6		4	
260	Diabetes mellitus	25		35	
270–277	Diseases of other endocrine glands	1		2	
280–289	Avitaminoses, and other metabolic diseases ..	4		6	
290–299	Diseases of blood-forming organs	25		15	
300–309	Psychoses	2		11	
310–318	Psychoneurotic disorders	2		—	
320–326	Disorders of character, behaviour and intelligence..	—		1	
330–334	Vascular lesions affecting central nervous system ..	671		630	
331	Cerebral haemorrhage		325		296
332	Cerebral embolism and thrombosis		305		300
340–345	Inflammatory diseases of central nervous system ..	10		20	
350–357	Other diseases of central nervous system	54		57	
360–369	Diseases of nerves and peripheral ganglia	1		3	
370–379	Inflammatory diseases of eye	—		—	
380–389	Other diseases and conditions of eye	—		—	
390–398	Diseases of ear and mastoid process	2		—	
400–402	Rheumatic fever	3		4	
410–416	Chronic rheumatic heart disease	95		106	
420 422	Arteriosclerotic and degenerative heart disease ..	1,326		1,299	
420	Arteriosclerotic heart disease, including coronary disease		598		646
422	Other myocardial degeneration		695		630
430–434	Other diseases of the heart	78		75	
440–447	Hypertensive disease	295		307	
440/3	Hypertensive heart disease		254		248
450–456	Disease of arteries	173		238	
460–468	Diseases of veins and other diseases of circulatory system	13		28	

TABLE 5.—continued.

Code No.		1952		1953	
		TOTAL	Including	TOTAL	Including
470–475	Acute upper respiratory infections	2		—	
480–483	Influenza	20		**69**	
490–493	Pneumonia (4 weeks plus)	222		**256**	
500–502	Bronchitis	235		**245**	
510–527	Other diseases of respiratory system	64		**80**	
530–539	Diseases of buccal cavity and oesophagus	2		**2**	
540–545	Diseases of stomach and duodenum	63		**54**	
550–553	Appendicitis	7		**7**	
560–561	Hernia of abdominal cavity	15		**13**	
570–578	Other diseases of intestines and peritoneum ..	41		**47**	
580–587	Diseases of Liver, gallbladder and pancreas ..	37		**25**	
590–594	Nephritis and nephrosis	41		**47**	
600–609	Other diseases of urinary system	34		**28**	
610–617	Diseases of male genital organs	45		**30**	
620–626	Diseases of breast, ovary, fallopian tube and parametrium	—		**2**	
630–637	Diseases of uterus and other female genital organs	5		**5**	
640–649	Complications of pregnancy	5		**2**	
650–652	Abortion	2		**2**	
660	Delivery without complication	—		—	
670–678	Delivery with specified complication	—		**2**	
680–689	Complications of the puerperium	—		**1**	
690–698	Infections of skin and subcutaneous tissue ..	—		**1**	
700–716	Other diseases of skin and subcutaneous tissue ..	5		**6**	
720–727	Arthritis and rheumatism, except rheumatic fever	10		**20**	
730–738	Osteomyelitis and other diseases of bone and joint	3		**2**	
740–749	Other diseases of musculoskeletal system	4		**1**	
750–759	Congenital malformations	56		**52**	
760–769	Birth injuries, asphyxia and infections of newborn	65		**67**	
770–776	Other diseases peculiar to early infancy	10		**13**	
780–789	Symptoms referable to systems or organs	3		**5**	
790–795	Senility and ill-defined diseases	24		**26**	
E800–802	Railway accidents	1		**2**	
E810–825	Motor vehicle traffic accidents	46		**33**	
E830–835	Motor vehicle non-traffic accidents	—		**1**	
E840–845	Other road vehicle accidents	3		**3**	
E850–858	Water transport accidents	2		**2**	
E860–866	Aircraft accidents	—		—	
E870–888	Accidental poisoning by solid and liquid substances	2		**4**	
E890–899	Accidental poisoning by gases and vapours ..	8		**9**	
E900–904	Accidental falls	55		**34**	
E910–936	Other accidents	36		**21**	
E940–946	Complications due to nontherapeutic medical and surgical procedures	—		—	
E950–959	Therapeutic misadventure and late complications of therapeutic procedures	—		**2**	
E960–965	Late effects of injury and poisoning	1		—	
E970–979	Suicide and self-inflicted injury	58		**51**	
E980–985	Homicide and injury purposely inflicted by other persons	—		**3**	
E990–999	Injury resulting from operations of war	—		—	
	TOTALS	5,043		**5,129**	

TABLE 6. Notifiable cases during 1953 (Port Cases—Nil). *Local figures.*

Notifiable Diseases	Notifications								Removed to Hospital		Notified in each quarter				Attack rate per 1,000 Population	Deaths (corrected for transfers) not necessarily relevant to notifications of 1953						
	At all ages	At ages—years :														All ages	At ages—years :					
		Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and upwards	No.	%	1st	2nd	3rd	4th			Under 1	1 to 5	5 to 15	15 to 45	45 to 65	65 and upwards
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	72	—	1	2	4	24	31	10	40	56	15	18	18	21	0.162	—	—	—	—	—	—	—
Scarlet fever	688	1	201	464	11	10	1	—	367	53	201	157	141	189	1.549	—	—	—	—	—	—	—
Para-typhoid	4	2	1	—	—	—	—	1	2	50	3	1	—	—	0.009	—	—	—	—	—	—	—
Typhoid	2	—	—	—	1	—	1	—	1	50	—	—	2	—	0.005	—	—	—	—	—	—	—
Tick typhus	1	—	—	—	—	1	—	—	1	100	1	—	—	—	0.002	—	—	—	—	—	—	—
Meningococcal infection ..	22	6	10	4	—	—	2	—	21	95	11	2	4	5	0.050	1	1	—	—	—	—	—
Poliomyelitis (including polioencephalitis) ..	69	1	16	33	4	13	1	1	68	98	3	1	33	32	0.155	5	—	1	—	3	1	—
Pneumonia	611	59	87	84	26	97	139	119	229	37	351	81	45	134	1.376	284	31	3	3	5	45	197
Malaria	11	—	—	—	8	2	1	—	8	73	1	2	6	2	0.025	—	—	—	—	—	—	—
Dysentery	118	8	34	43	8	11	5	9	45	38	6	15	19	78	0.266	—	—	—	—	—	—	—
Acute infectious encephalitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—
Puerperal pyrexia* .. (corrected)	220 169	—	—	—	98	121	1	—			76	61	35	48		—	—	—	—	—	—	—
Ophthalmia neonatorum ..	8	8	—	—	—	—	—	—			1	2	4	1		—	—	—	—	—	—	—
Measles	7,471	191	4,024	3,207	46	1	2	—	156	2	3,581	3,719	161	10	16.819	2	—	2	—	—	—	—
Whooping cough	1,994	207	1,086	690	1	9	1	—	132	7	322	581	712	379	4.489	2	1	1	—	—	—	—
Acute rheumatism (to 15 yrs.)	54	—	—	49	5	—	—	—	4	7	17	17	9	11		3	—	—	3	—	—	—
Food poisoning	176	12	19	27	17	32	28	41	12	7	47	18	92	19	0.396	—	—	—	—	—	—	—

* 20 cases occurred at home of which 3 were subsequently removed to hospital. No deaths were directly attributed to Puerperal Pyrexia.

TABLE 7. INFANT MORTALITY *(Corrected for transfers)*

Local figures

Total 1952	CAUSE OF DEATH	Total 1953	First day	From one day under one week	From one week to four weeks	Total under one month	Total from one month to under twelve months
1	T.B. respiratory	—				—	
1	Meningococcal meningitis ..	1				—	1
1	Non-meningococcal meningitis ..	2				—	2
—	Acute poliomyelitis	—				—	—
1	Whooping cough	1				—	1
23	Pneumonia (four weeks plus) ..	26				—	26
12	*Pneumonia of the newborn ..	6	1	3	2	6	—
—	Influenza	1				—	1
3	Bronchitis	—				—	—
2	Gastro-enteritis (four weeks plus)	3				—	3
34	*Congenital malformations ..	33	6	11	8	25	8
22	*Birth injury	17	9	8	—	17	—
31	*Atelectasis	43	22	20	—	42	1
5	*Haemolytic disease of newborn ..	5		3	2	5	—
1	*Haemorrhagic disease of newborn	1		1		1	—
2	Other diseases of early infancy ..	2	1		1	2	—
3	*Immaturity (unqualified) ..	6	4	2	—	6	—
5	Other causes	6			1	1	5
146	TOTALS	153	43	48	14	105	48
	Rate per 1,000 live births ..	22.03	6.19	6.91	2.02	15.12	6.91
	Year 1952 TOTALS	146	45	42	16	103	43
	Year 1952 Rate per 1,000 live births	21.60	6.66	6.21	2.37	15.24	6.36

* Where there has been mention of immaturity— { 1953—Bristol cases—56
During 1952—Bristol cases—53

Deaths in :—	Hospitals	126 (including 8—in outside city area Hospitals)
	Nursing Homes ..	4 (including 1—in outside city area Nursing Home)
	Private Residences ..	23
	Total ..	153

3. PREVALENCE AND CONTROL OF INFECTIOUS DISEASES

Diphtheria

The importance of diphtheria immunisation must be constantly emphasised to parents. If children are left unprotected there may be a return of diphtheria outbreaks.

Children under 5 years of age.

1951	1952	**1953**
49·8%	48·9%	**48.3%**

The total number of the under five population protected by immunisation (1953) was 16,727. The total under five population " at risk " was 34,600.

School children 5 + *to under* 15.

1951	1952	**1953**
74·4%	75·5%	**77.1%**

1953

The total number of children of over five and under fifteen (school age) was 64,300 out of which 49,607 had been protected by immunisation.

Total Child Population 1953

	0—5 years	5+ years to under 15	Total under 15 years
Total Child Population	34,600	64,300	98,900
Immunised Children	16,727	49,607	66,334
% of Immunised Children... ...	48·3%	77·1%	67·1%
1952 % figures in brackets ...	(48·9%)	(75·5%)	(65·82%)

Dysentery—See Appendix "A"

Erysipelas

Incidence 1945–1953

1945	1946	1947	1948	1949	1950	1951	1952	1953
151	82	144	144	135	133	84	91	***72**

* No deaths.

Food Poisoning—See Appendix "A"

Malaria

Incidence 1946–1953

1946	1947	1948	1949	1950	1951	1952	**1953**
23	8	13	6	4	4	9	***11**

* No deaths.

Measles—(Attack rate 16.819 per 1,000 population).

Notifications	**1953**	1952	1951	1950	1949	1948	1947	1946	1945
1st Quarter ...	**3,581**	197	4,265	48	2,960	72	1,783	16	2,912
2nd ,, ...	**3,719**	715	2,311	126	447	361	1,813	49	722
3rd ,, ...	**161**	812	208	441	263	1,355	204	44	67
4th ,, ...	**10**	375	306	2,222	30	3,725	65	194	23
Totals ...	**7,471**	2,099	7,090	2,837	3,700	5,513	3,865	303	3,724
Deaths of Bristol residents	**2**	—	3	3	4	1	3	—	9

Paratyphoid Fever See Appendix "A"

Poliomyelitis

Cases of poliomyelitis were more numerous in 1953 than in the two previous years but less than in the peak years 1949 and 1950. In 1953 the incidence was high throughout the second six months and two areas in the city contributed a fair number of cases in November and December.

Poliomyelitis

Confirmed Cases	Sex	Paralytic	Non-paralytic	Attack rate per 100,000 population			Deaths in 1953
				1953	1952	1951	
69	40 M. 29 F.	35 M. 23 F. } 58	5 M. 6 F. } 11	**15.5**	5·9	7·0	**5**

Poliomyelitis—Confirmed cases 1947/1953—by quarters

	1953	1952	1951	1950	1949	1948	1947
1st Quarter ...	**3**	—	4	4	5	2	1
2nd ,, ...	**1**	3	5	3	2	2	2
3rd ,, ...	**33**	21	20	161	65	15	17
4th ,, ...	**32**	2	2	98	63	10	12
Totals ...	**69**	26	31	266	135	29	32

Poliomyelitis—Confirmed cases 1953—by age group and sex

	Under 5 years	5 to 15 years	15 to 25 years	25 years plus	Total
Male ...	7	21	3	9	40
Female ...	10	12	1	6	29
Total ...	17	33	4	15	69
Deaths ...	1	—	—	4	5

Respiratory Diseases

Deaths of Bristol residents.

	1953	1952	1951	1950	1949	1948
Influenza ...	**72**	22	184	47	61	9
Bronchitis ...	**252**	231	322	245	241	208
Pneumonia...	**284**	235	321	215	211	194
Other ...	**80**	63	74	52	57	69

Notifications of acute primary and influenzal pneumonia were in the following years :—

1953	611
1952	427
1951	606
1950	530
1949	447
1948	456
1947	429
1946	519

Rheumatism (Acute)

Notifications 1953

0–4 years	5–9 years	10–14 years	15 years +	Total
—	22	27	5	54

Tabulation by Age, Sex and Clinical Classification of Cases Notified as Acute Rheumatism during the year 1953

Notification Area C.C. Bristol C.B.

Clinical Classification of Case Notified.	AGE IN YEARS								Total All Ages		Total Both Sexes
	0–4		5–9		10–14		15 over				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
1. Rheumatic Pains and/or Arthritis without heart diseases	—	—	2	*2	5	2	—	—	7	4	11
2. Rheumatic Heart Diseases (Active) (a) alone	—	—	1	2	2	—	—	—	3	2	5
(b) with polyarthritis	—	—	2	†1	4	4	2	—	8	5	13
(c) with chorea	—	—	—	†1	—	3	—	—	—	4	4
3. Rheumatic Heart Disease (Quiescent)	—	—	—	—	—	—	—	—	—	—	—
4. Rheumatic Chorea (alone)	—	—	—	*3	—	2	1	—	1	5	6
TOTAL Rheumatic Cases ...	—	—	5	9	11	11	3	—	19	20(*18*)	39(*37*)
5. Congenital Heart Disease	—	—	—	—	—	—	—	—	—	—	—
6. Other non-rheumatic heart disease or disorder	—	—	—	—	—	—	—	—	—	—	—
7. Not rheumatic or cardiac disease ...	—	—	8	3	2	2	2	—	12	5	17
TOTAL Non-Rheumatic Cases ...	—	—	8	3	2	2	2	—	12	5	17(*17*)

N.B.—There were 54 notified cases of Acute Rheumatism during 1953, of these 17 were non-rheumatic cases. You will notice from the Table that under the confirmed rheumatic cases two girls are classified twice, the reason is given below :—

† 1 *girl aged 6 years with Active Heart Disease, Arthritis and Chorea.*

* 1 *girl aged 8 years with Rheumatic Pains (No Heart Disease) Arthritis and Chorea.*

Accurate totals are recorded in Italics in the Table.

Whooping Cough

A scheme for whooping cough vaccination was introduced in the latter part of 1953. It is hoped that this will materially affect the incidence amongst young children, but it is as yet, of course, too early to assess.

Notifications—1948 to 1953—by quarters :

	1953	1952	1951	1950	1949	1948
1st Quarter...	**322**	913	310	409	69	679
2nd ,, ...	**581**	563	389	1,209	128	637
3rd ,, ...	**712**	212	595	1,162	63	390
4th ,, ...	**379**	142	608	301	109	132
Totals ...	**1,994**	1,830	1,902	3,081	369	1,838

Notifications—1944 to 1953—and Deaths :

Year	Notifications	Deaths of Bristol Residents
1953 ...	**1,994**	**2**
1952 ...	1,830	1
1951 ...	1,902	2
1950 ...	3,081	2
1949 ...	369	2
1948 ...	1,838	8
1947 ...	747	4
1946 ...	705	4
1945 ...	497	4
1944 ...	917	11

Scarlet Fever

In 1953 the 688 notified cases was a diminution of 178 on the previous year which was the highest figure since 1943 (866).

The disease was seen in its usual mild form and there were no deaths. As in previous year about two-thirds of the cases (464) occurred in children of school age, 397 of these were between the ages of 5 and 10 years and 67 between the ages of 10 and 15.

Notifications—1947 to 1953.

Year	Number	Rate per 1,000 population
1953 ...	**688**	**1.55**
1952 ...	866	1·95
1951 ...	546	1·24
1950 ...	821	1·86
1949 ...	785	1·78
1948 ...	547	1·26
1947 ...	463	1·08

Typhoid Fever—See Appendix "A"

Tuberculosis—See Appendix "B"

APPENDIX "A"

GASTRO-INTESTINAL INFECTIONS IN BRISTOL IN 1953

by H. Temple Phillips (*Chief Assistant Medical Officer*)

A. FOOD POISONING

The total number of cases notified as food poisoning during 1953 was 176. Figures for the past six years are as follows :—

1948	...	165
1949	...	289
1950	...	83
1951	...	85
1952	...	76
1953	...	**176**

All cases of food poisoning coming to the notice of the Medical Officer of Health have been included in the returns, whether or not they were formally notified by the doctors concerned. This, no doubt, accounts in some measure for the fact that the figures are the highest for several years, as such a policy has not always been followed in the past.

The following table shows the organisms isolated in the laboratory from food posoning cases :—

Organism	No. of Cases
Salmonellae (excluding typhoid and paratyphoid)	80
Staphylococcus aureus ...	15
Bact. Coli 055	1
Giardia Lamblia	1
None identified	79
Total ...	176

There were no deaths from food poisoning during the year, though one man, aged 73, died in hospital from other causes while under treatment for a salmonella infection.

(I) **Salmonella Infections** (other than typhoid and para-typhoid).

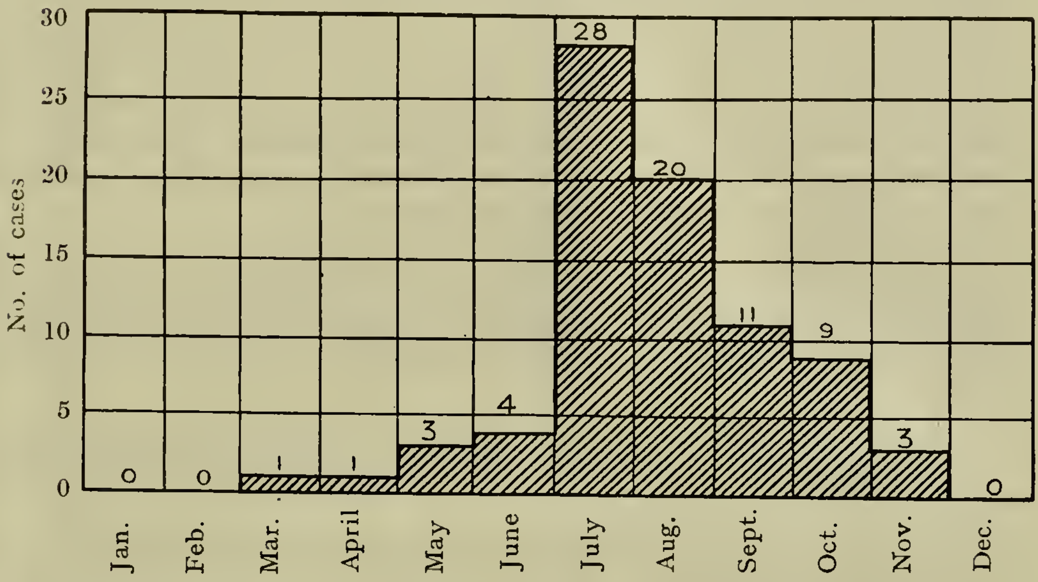
The following strains were isolated during the year :—

S. typhimurium ...	...	55 cases
S. st. paul	...	13 ,,
S. oranienberg ...	...	3 ,,
S. montevideo ...	...	2 ,,
S. newport ...	...	2 ,,
S. bovis morbificans	...	1 case
S. derby	...	1 ,,
S. tennessee ...	...	1 ,,
S. thompson ...	...	1 ,,
S. (new type) ...	...	1 ,,
		80

Of this total of 80 cases, 46 were single cases, and there were 13 outbreaks involving more than one case. No outbreak, however, involved more than one household.

As the following histogram shows, there was a sharp rise in salmonella notifications during the month of July, and 74% of the cases occurred during the third quarter of the year.

Monthly Incidence of Salmonella Food Poisoning—1953



Such a seasonal incidence is usually observed, and is no doubt mainly due to the fact that food poisoning organisms multiply more readily during warm weather. The prevalence of flies during the summer months is probably also an important factor.

The following table shows the age and sex incidence, and it will be noted that 47 cases (59%) were children under 15 years, and 33 (41%) were under five. The youngest patient was an infant of three days, and the oldest was 90 years of age.

Age and Sex Incidence of Salmonella Cases—1953

	Male	Female	Total
Under 1 year	7	6	13
1—1$^{11}/_{12}$ ...	2	5	7
2—4 ...	8	5	13
5—9 ...	2	5	7
10—14 ...	5	2	7
15—19 ...	0	1	1
20—29 ...	5	4	9
30—39 ...	3	6	9
40—49 ...	4	2	6
50—59 ...	1	3	4
60—69 ...	0	0	0
70+ ...	2	2	4
Total ...	39	41	80

Twenty-four salmonella cases were admitted to hospital, and the average stay in hospital was 29 days. The infection often proved difficult to eradicate, and fifteen cases were still excreting the organism in their stools after one month, in spite of treatment. Three patients continued to excrete it for seven weeks or more.

Numerous food samples were examined in connection with salmonella food poisoning cases, but in no instance was it possible to incriminate definitely any particular food. Three patients with salmonella typhimurium infection had recently eaten duck eggs. A number of patients during the month of July gave a history of having eaten cream cakes, mostly from the same firm of bakers. This bakery was visited on several occasions, but repeated faeces samples taken from the food-handlers proved negative. It was noted, however, that the method of filling cream cakes, using so-called " Savoy bags " was such that the cream could very easily be infected from the operator's hands. This method is very widely used in the bakery industry, but must nevertheless be looked upon as highly unsatisfactory and unhygienic.

An isolated case due to salmonella bovis morbificans occurred in a baby three months old in July. This strain is the same as that which caused an outbreak of food poisoning in Preston and North-West Lancashire during June, but no connection could be found with the latter outbreak.

A family of five became infected with salmonella st. paul while on a caravan holiday at Weston-super-Mare. No other similar cases were reported in that area.

A new, and as yet un-named, type of salmonella was isolated from a man aged 27 in November. It had not previously been reported in this country but is known to have occurred in Denmark. The source of infection could not be traced.

(2) Toxic (Staphylococcal) Food Poisoning

Five members of a school staff were taken ill with diarrhoea and vomiting in the middle of July, as a result of eating gammon ham for their mid-day meal. Strangely enough, although the school children were given ham from the same joint, none was ill. This is no doubt explained by the fact that the staff received the first cuts, and therefore the outermost part of the joint. Coagulase-positive staphylococci of the same phage type were isolated from the ham and from the patients' faeces. The ham had been obtained from a firm of wholesale grocers one week previously, and had been cooked and kept in the refrigerator in the meantime. Coagulase-positive staphylococci were also cultured from nasal swabs from two of the eleven food-handlers employed at the wholesale grocers.

An outbreak of six cases, involving three households, occurred in Bedminster at the end of July. The illness was caused by eating cold cooked meat purchased from a local butcher. The staff at the butcher's shop were examined, and, of the four food-handlers, coagulase-positive staphylococci were isolated from the hands of all and the nose of one. They were also isolated from the remains of the meat. There is no doubt that a much larger outbreak was averted by the prompt seizure of the remaining meat.

Another outbreak of two cases (mother and daughter) which occurred in Redland a week later, was traced to pressed beef purchased from a local butcher. Coagulase-positive staphylococci were isolated from a sample of the same pressed beef supplied by the butcher, from pressed tongue prepared at the same time, and from the nose of one of the food-handlers.

Informal enquiries suggested that the number of persons affected in both of the latter two outbreaks was much greater than the above figures suggest. Patients suffering from diarrhoea and vomiting often do not call in their doctor, and so are not notified as food poisoning cases.

An isolated case occurring in October was attributed to tongue sandwiches.

Comments

Most of the outbreaks occurred during hot weather in July and August. They draw attention to the risks attendant upon the preparation of cooked meats, particularly during warm weather. At least one local health authority is advising butchers to adopt an " aseptic technique " in the preparation of cooked meats, but it seems doubtful if such a procedure would prove acceptable to the majority of butchers on account of the additional time and trouble involved. The interval between ingestion and onset varied from two to nine hours, with an average of 4½ hours.

(3) Other outbreaks

An outbreak of 45 cases of food poisoning was reported at a hospital in March. No causative organism was discovered.

B. ENTERIC FEVER (TYPHOID AND PARATYPHOID)

The following table shows the incidence during the past six years :—

Year	Typhoid	Paratyphoid
1948	1	1
1949	7	2
1950	0	2
1951	0	9
1952	2	10
1953	**2**	**4**

(i) *Typhoid.* Two cases were reported during 1953. One was a young man aged 19, who was living in lodgings, and the other was his landlady, who was found to be a typhoid carrier. It seemed possible that she had acquired the infection in India, where she had lived a number of years previously. She was admitted to hospital for treatment and remains under periodic supervision.

(ii) *Paratyphoid.* There were four cases during the year ; three in one family were reported in March, and an isolated case occurred in April. In neither instance was it possible to ascertain the source of infection.

Chronic Carriers. In addition to the above cases, two chronic carriers of typhoid and one of paratyphoid were kept under observation during the year.

C. DYSENTERY

There were 119 cases notified during the year, and the following are the totals for the past six years :—

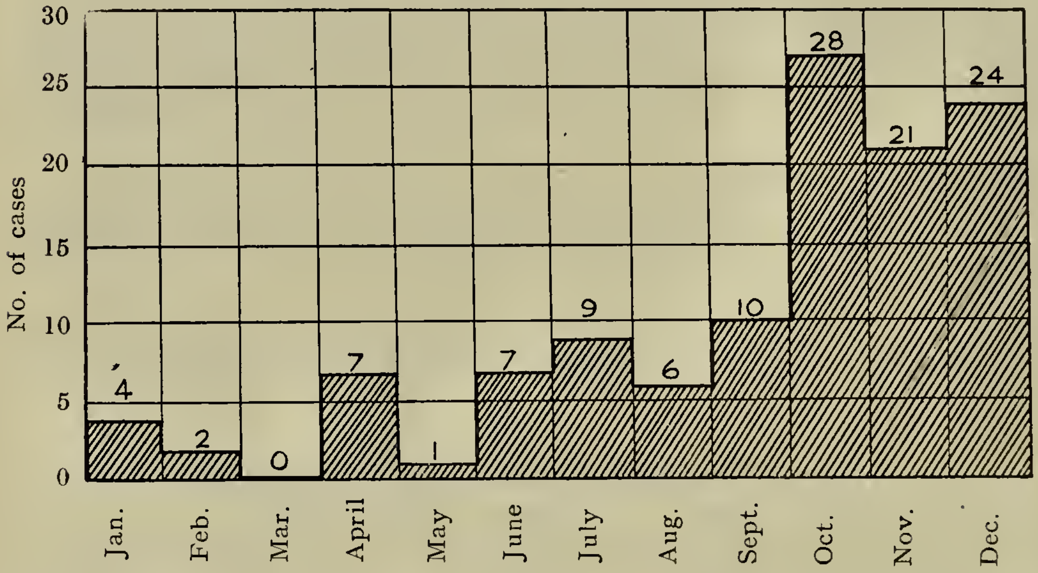
1948 ...	18
1949 ...	47
1950 ...	154
1951 ...	611
1952 ...	118
1953 ...	**119**

There were no deaths from dysentery, though one patient died from other causes while under treatment in hospital for dysentery.

In 101 cases the disease was of the Sonne type, and in the remainder the causative organism was not identified.

The following histogram shows the monthly incidence throughout the year, and it will be seen that the majority of cases (61%) occurred during the last quarter.

Monthly Incidence of Dysentery—1953



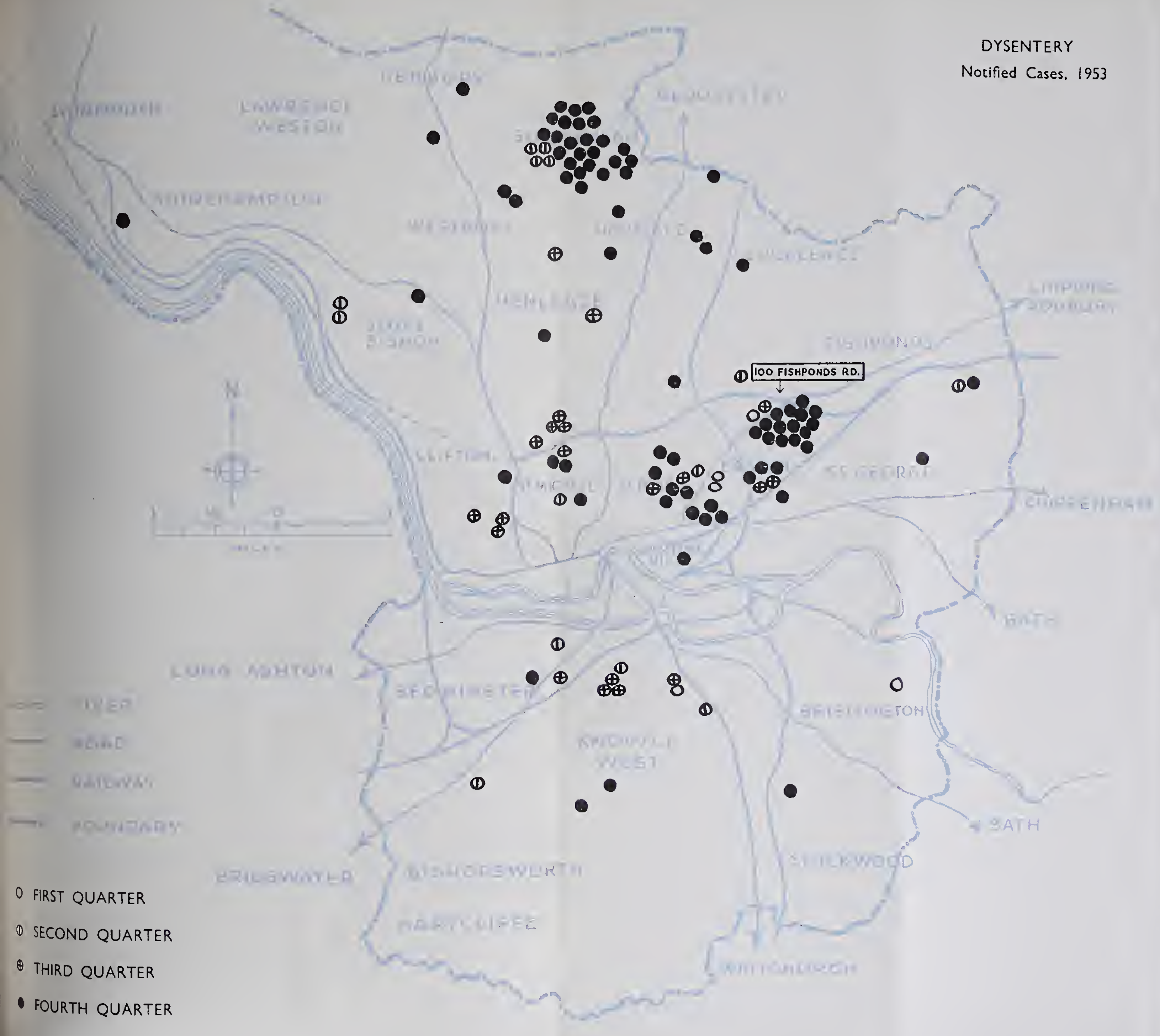
The incidence according to age and sex is shown in the following table. Eighty cases (67%) occurred in children under ten years of age.

Age and Sex Incidence of Dysentery Cases—1953

	Male	Female	Total
Under 1 year	4	4	8
1—1$^{11}/_{12}$ ...	9	2	11
2—4 ...	14	12	26
5—9 ...	17	18	35
10—14 ...	3	3	6
15—19 ...	1	0	1
20—29 ...	3	9	12
30—39 ...	0	6	6
40—49 ...	1	1	2
50—59 ...	1	1	2
60—69 ...	2	1	3
70+ ...	1	6	7
Total ...	56	63	119

DYSENTERY

Notified Cases, 1953



Sixteen cases of Sonne dysentery occurred at the Welfare Services Committee's Home at 100, Fishponds Road, during October and November. The cases were confined to the female reception centre and "F" Block (together with two cases in the female sick bay). In order to control the outbreak, it was decided to give all the occupants of the affected blocks a course of oral streptomycin. This is an expensive form of treatment, but the cost was amply justified, as what might well have been a very large outbreak was immediately cut short. Bacillary dysentery can be most difficult to control in an institution of this type.

The district most affected by dysentery was Southmead, where there were thirty cases—twenty-six during the last quarter of the year.

D. OTHER INFECTIONS

In July, the help of the Public Health Department was requested in connection with an outbreak of diarrhoea in a toddlers' block at a large residential children's home, which was persisting in spite of treatment. Samples of faeces from all the children in the affected block were sent to the laboratory, and, although no dysentery organisms were isolated, it was reported that giardia lamblia was present in 82% of cases. Mepacrine therapy was instituted, and the outbreak rapidly subsided.

Summary and Conclusions

An account is given of more than three hundred cases of gastro-intestinal infection occurring in Bristol in 1953. Almost half of the persons affected were children under 15. The incidence of food poisoning was maximal in the third quarter of the year ; that of dysentery in the last quarter.

Some of the outbreaks—notably those due to staphylococcal infection—were definitely traced to careless food-handling ; in other cases the actual source of infection remains obscure. All, however, must be regarded as instances of preventable illness, and it is perhaps not out of place to quote the words of King Edward VII—" If preventable, why not prevented ? " Enquiries among housewives show that many articles of food (*e.g.* tomatoes and fruit) are often eaten unwashed, although they may have been handled by all manner of persons before leaving the shop counter or street barrow. As bacteria do not multiply on food of this kind, large epidemics are unlikely to occur, and isolated cases of infection in this way would be next to impossible to trace.

All those who handle food must constantly remember that they have a responsibility for the health of others. The touching of food by hand should be reduced to an absolute minimum, and all food handlers must observe the strictest personal hygiene.

In all these investigations I have received invaluable assistance throughout the year from Dr. H. R. Cayton, Deputy Director, Preventive Medicine Laboratories (Director, Professor K. E. Cooper) and from the Chief Sanitary Inspector's staff of Food Inspectors, headed by Mr. P. Hayter.

APPENDIX "B"

TUBERCULOSIS

A. M. McFarlan (*Senior Medical Officer, Epidemiologist for Tuberculosis*)

During 1953 there were 462 notifications of new cases of tuberculosis in Bristol and 105 deaths due to the disease ; that is about nine cases and two deaths every week. These figures are to a certain extent encouraging, when compared with previous years (see Table 1). The new notifications were 72 less than in 1952 and the number of deaths was the same as the low level record of 1952. The 1953 figures are also a challenge, because there can be no complacency when 462 new cases have been added to the register of a preventable infectious disease. Moreover, the decrease in notifications is not altogether satisfactory when there are indications that unknown cases are the source of infection of many new cases. It would, in fact, be preferable if the discovery of these unknown cases leads for some years to an increase in the number of notifications.

Contact Examinations

The most important means of discovering unknown infectious cases is the examination of contacts of cases. The examinations of adult contacts have been undertaken by the Mass Radiography Service and it has not been possible to secure the attendance of more than 50% of contacts. In the latter part of 1953 there have been more frequent mass X-ray sessions and some contacts have been examined at the Chest Clinic. In 1954 arrangements will be made for a more rapid and more complete examination of contacts in the household and of other close associates of cases.

An index of places of work of new cases is kept and arrangements are made with the Mass X-ray Unit for examinations of employees in places where several cases occur.

Examination of child contacts is undertaken by the School Medical Service, using the Council's X-ray unit, for tuberculin positive children. Tuberculin negative children are almost all given B.C.G. vaccination, for it is rare to find that parents refuse their consent. Tuberculin testing and mass radiography have been used for school children who have been in contact with an infectious case at school.

The employment of known cases of tuberculosis

The Remploy factory at Southmead provides employment for tuberculosis cases, as do hospital kiosks which are run by the Tuberculosis Voluntary Care Committee. The Industrial Rehabilitation Unit and Vocational Training Unit also assist in training patients for employment. The present high level of employment and the large amount of light industry in Bristol have made it relatively easy to find suitable employment for ex-patients. Consultation between Chest Physicians and District Rehabilitation Officers has assisted in placing some difficult cases. No instances of spread of infection from ex-patients to fellow employees have come to our notice. Fellow employees are sometimes apprehensive about working alongside people who have been in a sanatorium and it is necessary to educate the public to a realisation that most of these sanatorium patients are not infectious.

Table I. Tuberculosis (including Port cases). *Local figures*

	CASES																DEATHS (corrected for transfers)												
	At all ages	Under one	1–	5–	10–	15–	20–	25–	35–	45–	55–	65 and plus	Quarters 1st	2nd	3rd	4th	At all ages	Under one	1–	5–	10–	15–	20	25–	35–	45–	55–	65 and plus	Death rate
Pulmonary tuberculosis: Cases notified	424	—	17	20	13	41	66	86	57	63	37	24	111	121	98	94	92	—	—	—	—	1	6	11	21	13	25	15	0.207
Other cases*	80	—	1	—	—	2	18	29	11	6	7	6	14	18	22	26													
Non-pulmonary tuberculosis: Cases notified	38	1	7	1	—	9	7	5	5	1	—	2	10	13	8	7	13	—	3	—	—	—	2	2	1	1	2	2	0.029
Other cases*	7	—	1	2	—	1	—	1	—	—	2	—	1	—	2	4													
Total .. 1953 ..	**549**	**1**	**26**	**23**	**13**	**53**	**91**	**121**	**73**	**70**	**46**	**32**	**136**	**152**	**130**	**131**	**105**	—	**3**	—	—	**1**	**8**	**13**	**22**	**14**	**27**	**17**	**0.236**
Total .. 1952 ..	642	1	26	26	27	78	87	152	96	62	50	37	167	156	160	159	105	1	2	1	—	2	10	9	17	23	20	20	0.237
1951 ..	668	4	27	29	31	76	112	136	83	87	53	30	146	204	169	149	165	1	3	1	2	6	8	23	34	33	35	19	0.372
1950 ..	558	4	30	30	23	76	75	119	77	54	49	21	152	165	119	122	200	1	6	2	—	5	18	30	35	44	37	22	0.452
1949 ..	635	4	20	31	24	83	95	132	93	68	52	33	186	158	157	134	217	1	6	7	1	10	20	38	39	37	38	20	0.49
1948 ..	635	3	33	45	27	86	100	84	73	47	27	27	141	178	167	149	238	3	9	3	1	12	18	40	49	43	33	27	0.55
1947 ..	618	7	30	27	27	92	111	123	76	65	40	20	160	167	137	154	276	4	10	7	3	17	29	48	48	41	54	15	0.64
1946 ..	692	4	28	40	29	104	105	140	92	71	52	27	163	204	161	164	265	4	10	4	7	19	21	51	41	41	40	27	0.64
1945 ..	632	4	29	41	28	85	96	136	75	55	58	25	173	168	138	153	297	4	11	3	10	15	32	53	55	41	54	19	0.72
1944 ..	648	3	19	27	35	97	103	119	108	71	42	24	165	177	167	139	256	3	8	4	1	15	32	53	49	34	37	20	0.63
1943 ..	717	10	16	29	31	90	122	161	96	87	53	22	202	169	160	186	305	10	14	7	3	22	29	66	49	48	42	15	0.82
1942 ..	587	4	12	10	30	29	59	113	103	94	78	55	153	152	128	154	264	6	11	3	6	2	21	30	42	53	47	43	0.70
1941 ..	588	7	33	30	21	89	80	113	91	71	37	16	144	167	121	156	310	5	11	7	4	29	32	65	60	43	35	19	0.86
1940 ..	564	5	40	44	20	81	65	113	85	57	35	19	157	179	120	108	273	2	16	4	3	24	36	44	47	52	36	9	0.66

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* Cases coming to the knowledge of the M.O.H. otherwise than by notification.

Deaths of persons whose tuberculous disease was not notified during life

In 1952 there were 24, and in 1953 there were 18 deaths of persons whose tuberculous disease was not notified during life. The death certificates came from hospitals in 14 instances in 1952, and 12 instances in 1953 ; from private doctors in six instances in 1952, and five instances in 1953 ; and from the Coroner in one instance in 1952 and four instances in 1953. Cases were investigated by home visits wherever possible.

The failure to notify from hospitals was due, in some cases, to the fact that the diagnosis of tuberculosis was made only shortly before death or only after autopsy, and in a few others to the presence of a chronic tuberculous lesion, which it was assumed, wrongly, had already been notified. In the 11 cases where private doctors signed the certificates, all the patients were over 50 years old and eight were over 70 years old. Here again there was an old standing lesion sometimes quiescent or arrested and no occasion had presented itself for the notification of a newly discovered case of tuberculosis.

The number of deaths of persons whose tuberculous disease was not notified during life has decreased in Bristol from 49 in 1946 and 48 in 1947, to 31, 36, 31, 31, 24 and 18 in subsequent years.

The importance of notification for prevention of the disease has been emphasized in bulletins sent by the department to general practitioners and by reminders to other doctors as opportunities arose.

Ascertainment of early cases

Supervision of contacts by radiological examination is an important method of detecting early cases. Mass X-ray examinations of adults in some firms and factories and of school leavers are carried out. A scheme for jelly patch testing of school entrants and of younger children at clinics and in nurseries will be introduced in 1954. Any children found to be positive will be X-rayed, as will adult members of their families and any other children in the family who react to the jelly test.

Hospital accommodation

There has been some diminution of the waiting lists and shortening of the delay in admission, particularly for women, where urgent cases have been admitted very rapidly.

Age and sex distribution of new cases

The numbers of new notifications in age and sex groups have shown a consistent pattern in recent years (see Table 2). The pattern is shown by the notification rates in age and sex groups (see Table 3).

Below the age of 15 in both sexes the rates are low. From 15 to 24 years of age the rates are high in both sexes. In later age groups there is a fall, but in males the rates are relatively high until age 65, whereas in females the rates fall progressively in each age group.

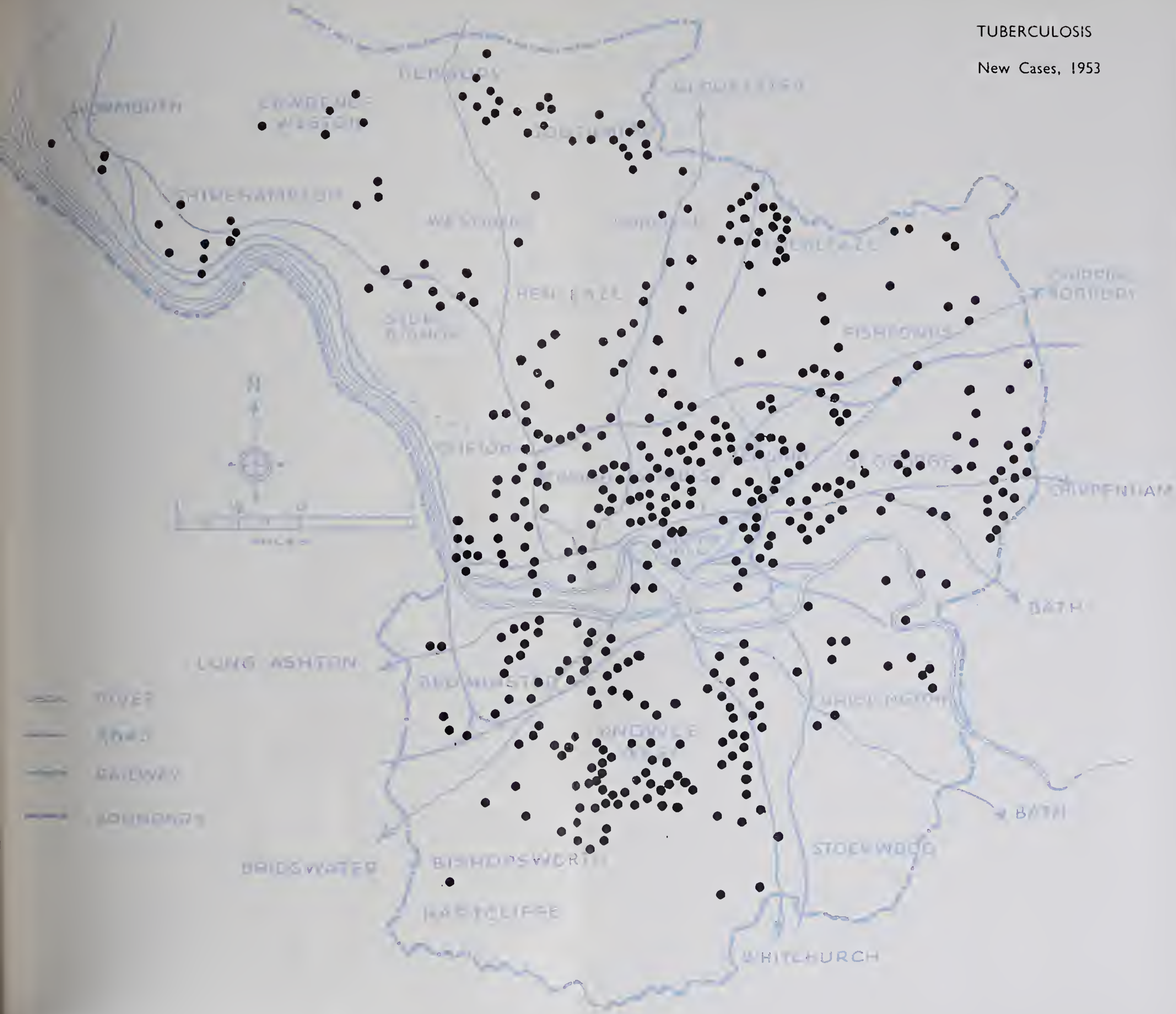
These figures show the importance of protecting susceptible school children before they leave school with B.C.G. vaccination, in order to diminish the high incidence of disease in young adults.

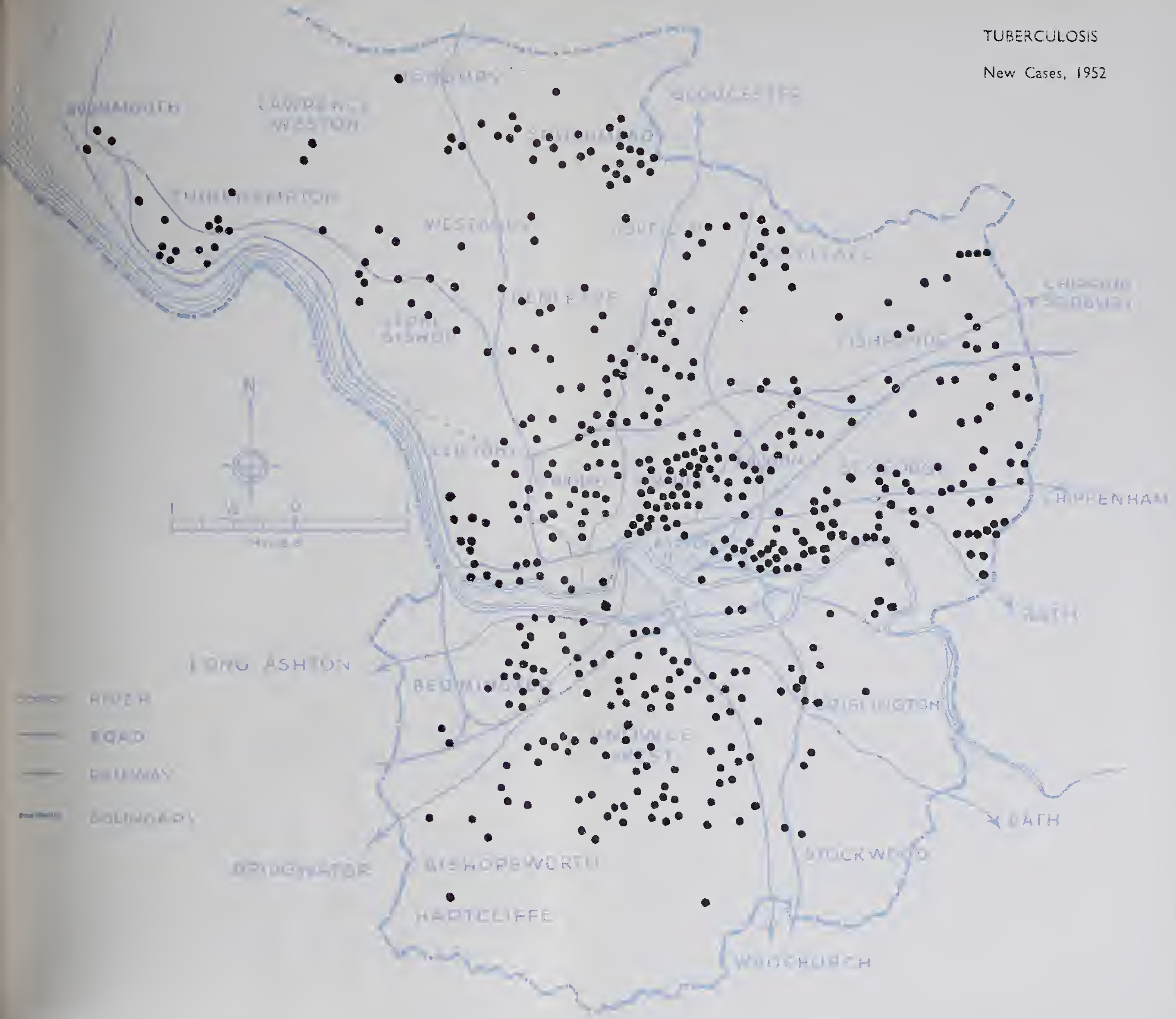
Geographical distribution of new cases

In 1952 and 1953 cases have been notified from all parts of the city (see maps adjacent). There are no localized areas of high incidence although the area round St. Paul's shows a thicker concentration of cases than other areas.

TUBERCULOSIS

New Cases, 1953





TUBERCULOSIS

New Cases, 1952

The attack rates by wards (see Table 4) confirm this impression and show a significantly low incidence in Durdham Ward. There is an indication here that it is still important for the prevention of tuberculosis in Bristol to continue the improvement of housing and of the living conditions of the poorer sections of the population.

Overcrowding and family size

Evidence of the association of tuberculosis with overcrowding is given by the observation that 26% of 444 new cases of pulmonary tuberculosis notified in 1952 were living at a density of over one person per room as compared with 14% living at that density according to the 1951 census figures.

Of the 456 cases of pulmonary tuberculosis notified during 1952, 52% came from households of four or more persons as compared with 35% living in households of that size according to the 1951 census.

These figures suggest that overcrowding is still associated with a high incidence of tuberculosis.

B.C.G. vaccination

Vaccination of susceptible contacts has been carried out under the supervision of Dr. A. T. M. Roberts, whose report is on page A30.

The City Council has asked for the approval of the Minister for a scheme to offer B.C.G. vaccination to susceptible school children between their thirteenth and fourteenth birthdays.

Tuberculosis Visitors

Owing to illness and the resignation of one visitor the tuberculosis visitors have worked hard during the year to cover the most important visits in their large areas. Their time for visiting has been cut down by an increase in the time spent in clinics. Discussions have been held with the Ham Green Hospital Management Committee about increasing the staff.

Care and After-Care

The service given by the Welfare Officers was handicapped by shortage of staff but the report by Mr. Bryant (Section B) shows that much work was done. With the full staff of three officers it will be possible to increase this service which plays an important part in therapy and prevention.

Records

The maintenance of the register of cases and of the necessary records for prevention and after-care activities is an important part of the work of the section and plans are being made to provide more easily accessible data about the patients and their families.

Plans for the future

In general the aim is to maintain and improve the existing services and especially to increase the X-ray control of contacts and to intensify the search for sources of infection. To this end close co-operation with chest physicians and with doctors in hospital and in practice is essential.

The chief new activities in tuberculosis prevention during 1954 will be the tuberculin testing of young children and the B.C.G. vaccination of thirteen-year-old school children. This latter will give additional opportunities for education of the public about tuberculosis.

Table 2. Tuberculosis—New Notifications by Age and Sex. 1949-1953

Year	0—		1—		5—		10—		15—		20—		25—		35—		45—		55—		65+		All Ages	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
PULMONARY																								
1949	1	0	6	3	11	5	2	11	34	36	36	42	60	52	47	21	48	8	22	14	12	7	279	199
1950	2	0	11	9	10	12	7	9	27	40	16	48	44	43	36	19	34	12	30	11	6	2	223	205
1951	1	0	10	10	10	10	9	9	27	31	45	51	54	48	47	17	52	15	27	10	11	9	293	210
1952	0	0	8	6	11	5	6	16	23	41	35	36	49	61	39	29	39	8	37	7	19	5	266	214
1953	**0**	**0**	**10**	**7**	**14**	**6**	**2**	**11**	**21**	**20**	**28**	**38**	**44**	**42**	**28**	**29**	**46**	**17**	**30**	**7**	**16**	**8**	**239**	**185**
NON-PULMONARY																								
1949	2	1	6	2	5	6	6	2	4	6	2	3	2	6	3	5	2	3	4	0	1	0	37	34
1950	2	0	3	6	7	1	3	2	2	2	2	2	4	3	4	5	2	0	0	1	0	0	29	22
1951	1	2	4	1	2	3	1	3	3	4	2	4	3	6	3	0	2	0	3	0	1	3	25	26
1952	0	0	2	6	5	3	3	0	3	1	2	3	2	6	3	7	2	3	2	1	0	0	24	30
1953	**1**	**0**	**5**	**2**	**0**	**1**	**0**	**0**	**3**	**5**	**2**	**5**	**2**	**3**	**1**	**4**	**1**	**0**	**0**	**0**	**1**	**1**	**16**	**22**

Table 3

Average Annual Notification Rates per 100,000 by Age and Sex : 1950, 1951, 1952

	Age Groups—years										
	0–	5–	10–	15–	20–	25–	35–	45–	55–	65+	All Ages
MALES											
Pulmonary ...	58	62	44	205	222	162	133	142	140	60	124
Non-Pulmonary	21	31	13	24	13	10	10	7	10	0	12
All Forms ...	79	93	57	229	235	172	143	149	150	60	136
FEMALES											
Pulmonary ...	47	51	73	289	296	173	62	38	32	17	90
Non-Pulmonary	29	11	13	15	19	17	11	3	4	3	11
All Forms ...	76	62	86	304	315	190	73	41	36	20	101

Table 4

Incidence of New Cases of Tuberculosis per 1,000 Population by Wards : 1952 and 1953

Ward		Population 1950	New Cases of Tuberculosis			
			1952	**1953**	Total	Rate per 1,000
1.	Avon	24,436	32	**22**	54	2·21
2.	Bedminster	17,049	14	**17**	31	1·82
3.	Bishopston	12,126	11	**10**	21	1·73
4.	Brislington	18,908	17	**12**	29	1·53
5.	Clifton	11,631	14	**17**	31	2·67
6.	District	15,593	27	**13**	40	2·57
7.	Durdham	14,769	11	**9**	20	1·35
8.	Easton	16,097	19	**18**	37	3·58
9.	Eastville	14,182	16	**17**	33	2·33
10.	Hengrove	33,186	34	**44**	78	2·35
11.	Hillfields	17,457	24	**16**	40	2·29
12.	Horfield	25,268	22	**29**	51	2·02
13.	Knowle	18,050	17	**18**	35	1·94
14.	Redcliffe	2,759	5	**4**	9	3·26
15.	Redland	12,430	19	**8**	27	2·17
16.	St. Augustine's	7,970	15	**12**	27	3·39
17.	St. George E.	18,173	23	**23**	46	2·53
18.	St. George W.	15,482	23	**10**	33	2·13
19.	St. James'	4,330	12	**10**	22	5·08
20.	St. Michael's	10,934	11	**11**	22	2·01
21.	St. Paul's	9,331	25	**23**	48	5·14
22.	St. Philip & St. Jacob N.	13,206	11	**16**	27	2·04
23.	St. Philip & St. Jacob S.	11,488	11	**15**	26	2·26
24.	Somerset	22,535	23	**22**	45	2·00
25.	Southville	13,675	14	**12**	26	1·90
26.	Stapleton	18,215	28	**14**	42	2·31
27.	Westbury-on-Trym	30,174	40	**30**	70	2·32
28.	Windmill Hill	13,187	16	**10**	26	1·97
	Total ...	442,641	534	**462**	996	2·25

TUBERCULOSIS—1945 to 1953

Pulmonary Tuberculosis

Year	Incidence	Attack rate per 1,000 population	R.G.'s No. of deaths (corrected)	Death rate per 1,000 population
1953	**504**	**1·13**	**93**	**0·21**
1952	582	1·31	91	0·21
1951	598	1·35	150	0·34
1950	495	1·12	182	0·41
1949	552	1·26	194	0·44
1948	540	1·24	208	0·48
1947	521	1·22	241	0·56
1946	598	1·44	236	0·57
1945	551	1·33	252	0·61

Non-Pulmonary Tuberculosis

Year	Incidence	Attack rate per 1,000 population	R.G.'s No. of deaths (corrected)	Death rate per 1,000 population
1953	**45**	**0·10**	**12**	**0·03**
1952	60	0·14	11	0·03
1951	70	0·16	14	0·03
1950	63	0·14	19	0·04
1949	83	0·19	23	0·05
1948	95	0·22	30	0·07
1947	95	0·22	35	0·08
1946	93	0·22	30	0·07
1945	81	0·20	54	0·13

The incidence figures include new notifications and cases coming to notice by transfer and from death certificates.

The figures of deaths are supplied by the Registrar General after correction for transfers.

B.C.G. VACCINATION

by Dr. A. T. M. Roberts (*Consultant Chest Physician*)

During 1953 the scheme for B.C.G. vaccination of child contacts of tuberculosis, started in May 1952, was continued. Altogether 1,107 children were seen ranging from a few months to twenty years in age. 249 (22.5%) were found to be already Tuberculin Positive and were referred for subsequent clinical and chest X-ray examination. The remaining 858 children were Tuberculin Negative and were vaccinated with B.C.G. The figures compare with a total of 641 seen in 1952 of whom 159 (25%) were Tuberculin Positive and 482 were Negative and were vaccinated. Numerical details of the individual sessions held are shown in Table I.

55 (6.4%) of the vaccinated children were still Tuberculin Negative when tested 6 to 8 weeks after vaccination, but 51 of them had become Positive when retested a few weeks later. Four children remained Tuberculin Negative and were revaccinated and all were successfully converted to Positive.

Very few local complications arose as a result of vaccination and no instances of serious or generalised disease. One youngster of 2 years developed five or six ' satellite ' ulcers within 2 inches of the primary site but all these eventually healed. Otherwise only a few deep ulcers and a few enlarged axillary glands were seen and all subsided without further incident.

The impression was gained that deep ulcers and delay in conversion to Tuberculin Positivity were associated with subcutaneous instead of intra-dermal injection of the vaccine.

The proportion of child contacts found to be Tuberculin Negative naturally decreased with age but, as can be seen in Table II, the percentage of negative reactors was higher in most age groups than in 1952. This suggests that, taken overall, the children seen in 1953 had been slightly less exposed to infection than those seen in 1952.

In addition to these children a further 177 new-born infants of tuberculous mothers or from tuberculous households were vaccinated by Dr. Grace Woods at Southmead and other Hospitals. This makes a total of 1,035 children vaccinated with B.C.G. during 1953 in Bristol.

Annual Check

In May 1953 we also started to retest after one year those children who were vaccinated with B.C.G. in 1952. Altogether between May and December 1953, 225 children were examined out of the 482 vaccinated in the same period of 1952. Every child's Tuberculin Jelly Test was still positive and no reversion to Tuberculin Negative was seen. No child had developed any tuberculous disease during the year and the incidence of other illnesses since vaccination was no greater than would be expected in such a group of children over a period of one year. Although less than half the children were actually examined the fact that every one of them was still Tuberculin Positive is very satisfactory and suggests that most, if not all, of the other 257 children would still have been Positive if tested. All these 225 children also had a Chest X-ray examination but no evidence of active tuberculosis or of other important chest disease was found.

Comment

The results to date of B.C.G. vaccination of tuberculosis contacts by the method used have been satisfactory, though it is far too early to assess the degree of protection afforded. The method certainly seems safe and no unusual or unpleasant complications have arisen. One interesting finding has been that, in the chest X-rays of a small number of children, examined one year after vaccination, calcified hilar glands have apparently been present. These calcified glands may have been due to B.C.G. infection but much more probably were due to a previous primary tuberculous infection. It may therefore be that we do occasionally vaccinate with B.C.G. children who have already received a natural primary tuberculous infection. There is no evidence however that this produces any illness or that the local reaction to B.C.G. vaccination is any more severe. Ideally of course it would be preferable to have a chest X-ray examination of every child prior to vaccination and perhaps this in time will be possible.

The question also arises of whether we should continue to rely solely on the Tuberculin Jelly Test for separating the Tuberculin Positives from the Negatives. I have thought this matter over carefully and feel that it is safe and justifiable to continue to rely on the Tuberculin Jelly Test up to 12 years of age. In children of 13 years and upwards however I suggest that we should in future use the intra-dermal Tuberculin Tests using Purified Protein Derivative (P.P.D.) This would bring the routine method for the older child contacts into line with the proposed method for vaccination of the 13 year old school children which is soon to start in Bristol.

B.C.G. Table I

Vaccination Date	Number Seen	Number Possitive	Number Negative and Vaccinated
16.1.53	55	17	38
7.2.53	57	15	42
21.2.53	49	5	44
14.3.53	89	13	76
2.5.53	82	17	65
9.5.53	81	19	62
16.5.53	79	11	68
13.6.53	81	24	57
11.7.53	82	18	64
29.8.53	71	11	60
5.9.53	61	9	52
12.9.53	57	15	42
10.10.53	78	19	59
21.11.53	99	33	66
19.12.53	86	23	63
Totals ...	1,107	249	858

B.C.G. Table II

Tuberculin Jelly Tests in Separate Age Groups

Age	Positive		Negative and Vaccinated			
	1952	**1953**	1952	%	**1953**	%
0—1	—	**1**	42	100%	**92**	**99%**
1	4	**5**	32	89%	**51**	**91%**
2	7	**1**	55	89%	**65**	**99%**
3	7	**10**	53	88%	**81**	**89%**
4	11	**12**	52	83%	**60**	**83%**
5	7	**15**	30	81%	**86**	**85%**
6	10	**13**	34	77%	**73**	**85%**
7	15	**14**	28	65%	**59**	**81%**
8	7	**9**	31	82%	**44**	**83%**
9	15	**31**	12	44%	**40**	**56%**
10	23	**18**	24	51%	**36**	**67%**
11	9	**23**	10	53%	**41**	**64%**
12	13	**21**	11	46%	**31**	**59%**
13	9	**25**	7	44%	**23**	**48%**
14	8	**10**	9	53%	**24**	**71%**
15	5	**16**	6	55%	**15**	**48%**
16	6	**11**	2	25%	**12**	**52%**
17	1	**13**	2	—	**11**	**46%**
18	1	—	1	—	**6**	—
19	1	**1**	3	—	**1**	—
20	1	—	1	—	**6**	—
Totals	161	**249**	482	75%	**858**	**77·5%**

4. METEOROLOGICAL OBSERVATIONS 1953

by A. G. Harding (*F.R. Met. Soc., Frampton Cotterell, Nr. Bristol*)

From observations taken daily at 9a.m. G.M.T., rainfall being entered to previous day)

Mean pressure (corrected to M.S.L.)	30.051″
Departure from average (32 years)	+0.098″
Greatest pressure	30.750″ on Mar. 10th
Least pressure	28.480″ on Feb. 10th
Extreme range	2.270″
Total rainfall at Bishopston (St. Andrew's Park)	30.73″
Departure from average at Clifton (39 years)	—4.36″
Number of rainy days	158
Heaviest fall in 24 hours	1.73″ on Aug. 29th
Total rainfall at Frampton Cotterell	27.62″
Departure from average	—3.90″
Number of rainy days	176
Departure from average	—8
Days with 0.04″ or more	113
Days with less than 0.04″	63
Days with trace	8
Heaviest fall in 24 hours	1.56″ on Aug. 23rd
Mean humidity	87%
Mean temperature	50.0°
Departure from average	+0.6°
Maximum temperature in screen	82.6° on May 25th
Minimum temperature in screen	19.8° on Jan. 5th
Extreme range in screen	62.8°
Minimum temperature on grass	15.2° on Feb. 8th
Mean of warmest day	71.2° on Aug. 12th
Mean of coldest day	27.7° on Feb. 15th
Hours of bright sunshine (estimated)	1,675
Departure from average	+137
Days of bright sunshine	102
Days entirely overcast	62
Days with snow	5
Days with thunder	10
Days with fog	38
Days with frost	49
Days with ground frost	111

Notes

1. In both the first and the last three months of the year the rainfall was well below average with an exceptionally long dry spell from February 21st to March 26th.

2. Although mainly fine and sunny, August had the heaviest rainfall (5.07″). This all fell in the second half of the month and was largely due to very heavy falls on the 19th (0.88″), 23rd (1.56″) and 29th (1.13″). July was the next wettest month (4.18″) and January (0.92″) and December (0.93″) the driest.

3. Both the Whitsun and August holidays were fine and sunny, with the highest temperature of the year being recorded on Whit-Monday. August, September and October had much more sunshine than the average.

4. The outstanding feature of the year's weather was the mildness of the autumn and early winter. The mean temperatures for November and December were over 4° above average. There were no sharp frosts in this period—only twice did the minimum screen temperature drop below 30° (29° on Dec. 1st and 28° on Dec. 21st) compared with 21 occasions in 1952.

PERSONAL HEALTH SERVICES

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1. MATERNAL AND CHILD WELFARE

by Dr. Sarah Walker (*Senior Medical Officer, Maternal and Child Welfare*)

(i) CARE OF MOTHERS AND YOUNG CHILDREN

Developments in the maternal and child welfare section of the department, during 1953, include the introduction of a scheme by which general practitioners are offered facilities to undertake the ante-natal care of their own patients, in certain of the city's health centres ; a " follow-up " service by the domiciliary midwives as part of a special drive on toxaemia of pregnancy ; and the extension of group education in ante-natal and child welfare clinics. A scheme for whooping cough vaccination by general practitioners, and medical officers of the department, has been started ; and arrangements are in hand for smallpox vaccination to be undertaken in infant welfare clinics, and for tuberculin jelly patch testing of certain groups of pre-school children.

Maternity Service

The total number of live births to Bristol mothers in 1953 was 6,945 compared with 6,760 in 1952. About 72% of Bristol mothers are confined in hospitals or maternity homes. As the number of maternity beds in the city has remained the same, the inevitable result of this rise in institutional confinements, during recent years, has been the earlier discharge home of mothers and babies. During the year, 2,064 mothers delivered in maternity hospitals, were discharged home before the 14th day. Discharges home between the 4th and 9th days are regarded as particularly undesirable, because at this stage, the mother having already started to get up, is often tempted on her return home to undertake household duties before she is fully recovered from her confinement.

Ante-Natal Care

There are 16 ante-natal clinics in the city. Consultants attend at 12 of these centres. At the William Budd, Lawrence Weston, Granby House, and Brooklea centres, general practitioners hold sessions for their own patients, in co-operation with the local midwives. This arrangement enables all members of the maternity service to work together as a team, while the facilities provided by the health department—routine blood tests, chest X-rays, dental treatment, mothercraft and ante-natal exercise classes, are readily available. The scheme is working well, and it is hoped to extend the arrangement to other centres during the coming year.

The value of routine chest X-rays for expectant mothers has been fully established, several cases of early tuberculosis having been detected as a result of this routine measure.

The haemoglobin estimations for expectant mothers are now undertaken at the Central Clinic by specially trained nurses whose work, in this connection, is supervised by Dr. Lewis of Southmead Hospital.

Two new classes for ante-natal exercises, relaxation and post-natal exercises, were started during the year, bringing the total to nine.

The following statistics relate to the work of the ante-natal and post-natal clinics in 1953 :—

Ante-natal Clinics	
No. of mothers attending ante-natal clinics	4,437
Total number of attendances	30,103
Post-natal Clinics	
No. of mothers attending post-natal clinics	2,404
Total number of attendances	3,617

Birth control instruction is given at post-natal clinics, to mothers requiring advice for medical reasons ; 126 new patients attended for instruction during the year, the total attendances being 957.

Parentcraft Clubs

Mothercraft classes have, for many years, been run in association with the ante-natal clinics. In two centres, a new method of conducting these classes, or " parentcraft clubs," has been tried out. A team, consisting of medical officer, health visitors, midwives and nutritionist, have, in turn, been responsible for leading the group. The club is held on the same afternoon as the ante-natal exercise class, so that mothers are able to combine attendance at both. Two special evening sessions have been included in each course, to which expectant mothers have been invited to bring their husbands. One advantage of this new approach has been the fact that the various members of the " teaching team," including the physiotherapist, have been able to exchange ideas and so ensure that their teaching is along the same lines.

(ii) DOMICILIARY SERVICE OF MIDWIVES

Supervisor of midwives	Miss Gearing
Deputy Supervisor and Tutor for Part II training	Miss Creer
District midwives (including two premature baby midwives)	32

The number of mothers attended at confinement, during 1953, by the city's domiciliary midwives was 1,886.

The general work of the midwives has increased during the year, in connection with the nursing of patients discharged home early from hospital, and with the follow-up of toxaemia cases.

Training of pupil midwives and of medical students is undertaken on the district. The help and co-operation of the general practitioners in the training scheme is much appreciated.

The following statistics relate to the work of the midwives during 1953 :—

Confinements attended by Midwives

	Doctor present at delivery	*Doctor not present at delivery*
(a) Doctor not booked	0	838
(b) Doctor booked	636	412*
Total ...	636	1,250

* *In a high proportion of these cases, although the doctor left the conduct of delivery to the midwife and was not present at the actual time of birth, he (or she) often visited immediately following delivery—to see mother and baby. Total number of medical aid calls* = 330

Administration of Analgesics by Midwives

(1) *Gas and Air*

When (a) Doctor present at delivery ...	...	506 mothers
(b) Doctor not present at delivery	...	1,081 ,,
Total	...	1,587 (*i.e.* 84%)

(2) *Pethidine*

When (a) Doctor present at delivery ...	...	283 mothers
(b) Doctor not present at delivery	...	285 ,,
Total	...	568 (*i.e.* 30%)

An important service undertaken during the year has been the special follow-up home visits by midwives to expectant mothers showing early signs of toxaemia, or other abnormalities. The great majority of these mothers have been booked for hospital confinement. Between mid-February, when the scheme started, and the end of December, 1953, 389 mothers were visited. Nearly 70% of these were patients showing early signs of pre-eclamptic toxaemia. Many instances occurred, where as a result of these special visits, increase in signs of toxaemia were immediately detected and admission to hospital arranged. Eclampsia is a preventable condition, so that we should look forward to its complete elimination—an achievement which has, in fact, been reached in a number of cities in Australia.

Obstetric Discussion Group

We are grateful to Professor Lennon for giving us the opportunity to participate in the obstetric discussion group, which is held each week at Southmead Hospital. These meetings have been not only of great clinical interest, but have also helped to co-ordinate the ante-natal, domiciliary and hospital maternity services.

(iii) SUBFERTILITY CLINIC

The work undertaken in the clinic has extended by the attendance of a Consultant from Professor Lennon's staff. This has greatly enhanced the value of the service, as specialist investigations are now undertaken in the clinic, without having to refer the patients elsewhere for this purpose.

Dr. Norma Boxall, medical officer of the women's subfertility clinic, has supplied the following details of the work undertaken during 1953 :—

Number of new cases seen		120
Number of attendances for follow-up or investigation ...		454
Number of investigations undertaken by Consultants ...		129
Insufflations	37	
Biopsies	36	
Cauteries	8	
Salpingograms	26	
Huhner's test	21	
Polypi removed	2	
Number of pregnancies reported during year		38

An increasing number of patients are referred to the centre by general practitioners.

A number of unsuspected cases of endometrial tuberculosis have been found during routine investigation and referred to sanatoria for treatment. These patients would otherwise have gone undiagnosed and untreated.

Research into the relationship between the bacteriological flora of the cervix and infertility is in progress.

Dr. Irving Bell, medical officer of the men's subfertility clinic, has supplied the following details for 1953 :—

Number of new cases seen	155
Total attendances	294

New cases were referred from :—

1.	General practitioners	91
2.	Women's subfertility clinic	44
3.	Bristol Marriage and Family Guidance Council...	20

(iv) CARE OF THE UNMARRIED MOTHER

Mrs. Stott, who held the post of Welfare Officer since its inception in 1930, retired during the year, owing to ill-health. It was mainly as a result of Mrs. Stott's vision, ability and devoted work that a welfare service—probably the most comprehensive in the country—was built up to meet the needs of the unmarried mother and her child. Mrs. Stott was a very able administrator, but it was her deep understanding of, and her human approach to the personal problems of each individual mother which particularly impressed those of us who had the privilege of working with her.

The city Mother and Baby Home at Snowdon Road provides accommodation for unmarried mothers both before and after confinement. Thirty-five mothers were admitted during 1953, the usual length of stay being four to five months.

Grove House Hostel, by arrangement with the City Council, admit a number of unmarried mothers who wish to retain their babies. The mothers take up outside employment, but reside in the Hostel with their babies, who are cared for during the day by the staff.

The need for hostel accommodation for homeless unmarried mothers, determined to keep their babies, has, in our opinion, been fully established.

Miss Reed, the welfare officer, has supplied the following details of the work of this section :—

During the year 301 applications were received in respect of unmarried mothers and their babies.

1st illegitimate baby	214
2nd ,, ,, ...	63
Other applicants (including some who cohabit and others who appear unable or unwilling to change their mode of living)	20
Subsequently proved legitimate	4

At the end of 1952 there were 70 cases outstanding where the baby had not been born, making a total of 371 cases which have been dealt with as follows :—

Admitted to hospital for confinement	232
Admitted to hospital immediately after confinement	2
Born at Mother and Baby Homes	9
Born at Private Nursing Home	1
Home confinement	21
Assistance in confinement not sought	25
Baby not yet born	81
	371

Owing to the increased and revised maternity benefits, there is a tendency for a greater number of girls to remain in their own homes, rather than enter mother and baby homes. This entails frequent visiting and very close co-operation with the health visitors.

There is a wide age range amongst the applicants, the greatest number is in the under-twenty age group, but the older woman still presents a problem.

Affiliation Work

This forms an important part of the work of the section. Constant help is given in obtaining Court Orders, increases on existing Orders and arrears outstanding. The following is the analysis of affiliation work :—

At the end of 1952 there were 196 cases incomplete, to which must be added 301 cases received during 1953, *i.e.*, 497 cases to be dealt with.

Affiliation Orders obtained	47
Agreements	16
Payments direct	12
Information laid	7
Child adopted	52
Married to putative father	40
Married to another man	5
Returned to live with husband	2
Putative father not known	11
Man not traced	14
Cohabiting	25
Man left country	4
Woman deported	2
Case dismissed	3
Summons withdrawn	1
Application withdrawn	4
No corroboration	23
No action possible : 1. Stillbirth ... Abortion ... Child died ...	10
2. Girl died	3
3 M.D. certified	6

Affiliation Work—continued

Left area	46
Incomplete	79
Baby not yet born	81
	493
Proved legitimate	4
	497

(v) CHILD CARE

Home visits by the Health Visitors still remain the most important part of any preventive service for the care and supervision of young children. Particular attention is paid to delicate and handicapped children, and to mothers in need of special instruction and guidance in the care of their babies or young children.

Follow-up visits to children on discharge home from hospital play an important part in the re-establishment of health.

No. of children under 5 years old visited	34,280
No. of infants (*i.e.* under 1 year) 1st visits	6,940
Total visits ...	36,237
Children 1–2 years old—Total visits	26,526
Children 2–5 years old—Total visits	40,954

Child Welfare Clinics

There are 35 centres in the city, with an average of 330 sessions per month (292 sessions per month in 1952).

The following statistics relate to attendances during the year :—

No. of children who first attended in 1953 and who at their first attendance were under 1 year old ...	8,717
No of children who attended during year and who were born in :—(1) 1953	5,928
(2) 1952	3,238
(3) 1951–48	2,267
Total number of children ...	11,433
No. of attendances made by children who at date of attendance were—(1) Under 1 year	90,439
(2) 1–2 years	14,745
(3) 2–5 years	16,210
Total attendances	121,394
(c.f. 1952 ... 99,550)	

Routine periodic toddler examinations are now undertaken at all centres and have proved of value in detecting early defects, and in providing an opportunity for the mothers to discuss special problems.

Whooping cough vaccination is now undertaken in the clinics. Tuberculin jelly patch testing and also smallpox vaccination is to start at the beginning of 1954.

Group health education by the health visitors has been considerably extended during the year. Increasing use has been made of visual aids, including films and film strips.

Special Clinic for Mentally Retarded Children

This is held fortnightly at Central Clinic. Dr. Grace Woods acts as medical officer. The clinic is much appreciated by mothers seeking advice and help on the care of a backward child.

Care of the Premature Baby

Details of the special scheme for the care of premature babies in Bristol have been given in previous reports. With the increasing " case load " for the two special premature baby health visitors, arrangements have been made for an earlier transfer of cases to the health visitors. The same general plan of supervision and care of premature babies is followed by all medical officers and health visitors in the city.

Dr. G. Hartley and Dr. Falconer are attached to the Premature Baby Follow-up Clinics, at Southmead and the Bristol Maternity Hospitals, respectively.

Premature babies—live births in 1953 :—

Born (1) In hospital	354
(2) At home	72
(3) In private nursing home	8
Total ...	434

Reference to Consultants

The following statistics relate to children referred to consultants from the child welfare clinics and nurseries :—

Ear, Nose and Throat Consultant	77
Eye Consultant	86
Heart Consultant	3
Orthopaedic Consultant	144
Skin Consultant	37
Eneuritic Clinic	18
Tuberculosis Contact Clinic	126
Chiropody Clinic	3
	494

Voluntary Organisations

Close co-operation is maintained with various voluntary organisations in the city, concerned with the welfare of mothers and young children. They include the National Society for the Prevention of Cruelty to Children, and a number of voluntary homes which admit unmarried mothers and babies. The Senior Maternal and Child Welfare Medical

Officer represents the department on the executive committees of the Marriage Guidance Council and the Family Planning Association, and is a member of the Children's Committee of the Bristol Diocesan Moral Welfare Association.

Liaison with Hospitals

One of the city's child welfare clinics—at Clifton—is staffed by Professor Neale and members of his department. Registrars from the Children's Hospital are given opportunities to work in child welfare centres, while medical officers of the health department act as clinical assistants to various hospital paediatric departments. These reciprocal arrangements are undoubtedly a great benefit to the staffs of both departments.

We are grateful to Professor Neale for giving us the opportunity to participate in clinical meetings at Southmead and the Children's Hospitals.

Liaison with the Children's Department

The Medical Officer of Health is the medical advisor to the Children's Committee. Close co-operation is maintained between the two departments on all medical questions relating to children in the care of the Children's Committee.

Dr. Greta Hartley acts as medical officer to the Downend Babies and Children's Homes. Dr. Alison Craig acts similarly for Nore House and Timsbury Residential Nurseries, and also for the Mangotsfield Reception Centre. Dr. Craig also undertakes the medical examinations in connection with adoptions.

Joint work is frequently undertaken by the officers of both departments in connection with "special families." "Combined operations" prove to be especially valuable in cases of child neglect.

(vi) DAY NURSERIES

The seven day nurseries in the city continue to provide for special groups of young children, who are admitted for either health or social reasons.

It is generally agreed that the best place for a young child, especially the child under two years of age, is at home in the care of his mother, but unfortunately circumstances may arise which make this ideal arrangement impossible. In cases where the mother is the sole supporter of her child, when illness occurs in the home, or where home conditions are unsatisfactory, the day nursery is often an alternative to removal of the child from his home, to either a residential nursery or to the care of a foster mother.

By arrangement with the Welfare Services Department, a number of young children from the reception centre at 100 Fishponds Road are admitted to certain of the city's day nurseries.

Miss Bennett, supervisory warden, resigned during the year to take up a post abroad. Miss Bennett had been associated with the work of the nurseries for many years and we are very grateful for all the help she gave us. The Education Committee decided not to replace Miss Bennett and the wardens were transferred to the staff of the health department. In order to retain the advice and help of the Education

Department on questions relating to the play and occupation of the children, arrangements have been made for periodic visits to the day nurseries by Miss E. M. Parry, inspector of nursery schools and classes. In addition, each day nursery is linked to a nursery school, so that the sisters and wardens can keep in touch with new developments in the educational field. The continued help of the Education Department, in this connection, is much appreciated.

The nurseries have been in quarantine for considerable periods during the year, mainly on account of measles and whooping cough. It is hoped that the incidence of whooping cough will, in time, be reduced, as whooping cough vaccination becomes more widely practised.

The following table gives the position of staffing and attendances at the day nurseries on 31st December, 1953 :—

Children on Register

Under 1 yr.	1—2 yrs.	2—5 yrs.	Total	Waiting List	Accommodation	Average Attendance
15	53	211	279	11	290	183

Staff

Nursing	Wardens	Students	Domestic
33 (a)	6	6	24 (b)

(a) Includes the supervisory matron of the nurseries.

(b) Some part-time—equivalent to approximately 20 full-time.

Nursery Schools and Classes

Arrangements for the medical inspection and supervision of children attending nursery schools and classes are undertaken by the Maternal and Child Welfare Section of the department. Details of these inspections will be found in the report of the School Health Service.

Nurseries and Child Minders Regulation Act, 1948

At the end of 1953, there were seven child minders registered under this Act. These minders run small nursery classes for children of two to five years old, for short daily sessions of 2½—3 hours. Regular periodic inspections are undertaken by the Deputy Chief Nursing Officer.

Nursing Homes

At the 31st December, 1953, there were thirteen registered nursing homes in the city, providing accommodation for 314 patients.

Medical and surgical ...	153
Chronic sick	142
Maternity	19
Total ...	314

The registration of one nursing home was cancelled during the year.

Recuperative Convalescence for Mothers and Young Children

Convalescence has been provided for thirty-five mothers accompanied by sixty-four children, and for eight unaccompanied children, during the year.

The Children's Committee at the request of the Health Committee, have recently agreed to accept unaccompanied children in need of convalescence, in suitably selected cases, at their country residential nurseries—Timsbury and Nore House.

The only homes in the region available for mothers accompanied by children, are " Holiday Homes." It has long been realised that there is a need for a " Convalescent Home " in the region for mothers and children. There is, at present, no provision for mothers with very young babies, although cases arise, for example, after a complicated or difficult confinement, where convalescent treatment would be of inestimable benefit to the mother and baby.

(vii) STATISTICS

Table I—MATERNITY AND CHILD WELFARE.

	1952	**1953**
(a) *Notifications :*		
Live Births (including 522 premature births)	7,656	**7,786**
Still Births	190	**140**
Confinements at Home	1,930	**1,935**
Premature Births admitted to Hospital (included above)	25	**17**
Confinements at Institutions	5,820	**5,895**
(b) (i) *Municipal Midwives :—*		
Cases completed as (a) Midwife	1,217	**1,250**
(b) Maternity Nurse	625	**636**
Nursing Visits	25,015	**24,856**
Other Visits	24,619	**26,779**
Attendances at Ante-natal Clinics	1,702	**1,703**
(ii) *Pupil Midwives :—*		
Cases completed as Midwife	988	**917**
Nursing Visits	15,323	**15,066**
Other Visits	7,761	**7,725**
Attendances at Ante-natal Clinics	806	**768**
(iii) *Medical Students—District Midwifery :—*		
Cases attended	41	**83**
(c) *Attendances at Clinics :—*		
(i) *Municipal Ante-natal (Medical Officers Sessions)*		
Verrier Road	1,898	**1,762**
Bedminster	1,675	**1,570**
Brooklea	595	**621**
Brislington (Water Lane)	782	**834**
Knowle	2,123	**1,885**
North Bristol	2,821	**2,135**
Portway	1,146	**714**
Central	2,836	**2,442**
South Bristol	2,713	**2,437**
Southmead	2,942	**2,605**
Speedwell	2,641	**2,290**
Clifton	1,748	**1,820**
Frenchay	309	**493**
Dovercourt Road	300	**478**
William Budd	862	**856**
Lawrence Weston	—	**994**
	25,391	**23,936**
Average per session	16.6	**14.7**
New Patients	3,605	**3,317**
(ii) *Municipal Ante-natal (Midwives Sessions) :—*		
Verrier Road	704	**746**
Bedminster	384	**379**
Brooklea	179	**190**
Brislington (Water Lane)	199	**162**
Knowle	524	**466**
North Bristol	796	**1,124**
Portway	416	**214**
Central	126	**143**
South Bristol	450	**367**
Southmead	567	**503**
Speedwell	428	**376**
Clifton	124	**155**
Frenchay	82	**74**
Dovercourt Road	141	**78**

Maternity and Child Welfare—*continued.*

	1952	1953
Municipal Ante-natal (Midwives Sessions) (contd.)—		
William Budd	627	**737**
Lawrence Weston	57	**203**
Headley Park	—	**250**
	5,804	**6,167**
Average per session	8.0	**7.7**
New patients	62	**48**
(iii) *Post-natal Clinics* :—		
Central	1,050	**755**
Bedminster	298	**157**
Speedwell	353	**386**
Southmead	664	**766**
Portway	179	**93**
Knowle	461	**432**
Clifton	216	**229**
Bristol South	303	**296**
Verrier Road	232	**223**
Frenchay	87	**67**
William Budd	—	**134**
Lawrence Weston	—	**62**
Brooklands	—	**17**
	3,843	**3,617**
Average per session	9.4	**10.4**
New Patients	2,411	**2,211**
(iv) *Consultative Ante-natal Clinics* :—		
Central	877	**1,046**
Bedminster	515	**388**
Speedwell	425	**343**
Southmead	4,035	**4,030**
Portway	258	**205**
Knowle	521	**493**
Bristol South	571	**571**
Bristol North	1,431	**1,418**
Verrier Road	1,100	**1,024**
Clifton Health Centre	310	**253**
William Budd	635	**756**
Lawrence Weston	—	**81**
	10,678	**10,608**
Average per session	19.2	**17.9**
New Patients	4,437	**3,776**
(v) *Municipal Infant Welfare Centres—Mothers*:—		
Central	4,639	**3,814**
Speedwell	5,984	**5,529**
Southmead	4,835	**4,730**
Portway	2,679	**2,468**
Knowle	6,351	**6,245**
South Bristol	7,642	**6,320**
Bedminster	3,832	**3,861**
Barton Hill	1,606	**1,619**
Headley Park	906	**952**
Moorfields	2,133	**2,113**
Brislington (Salisbury Road)	804	**1,108**
Clifton	3,282	**3,203**
North Bristol	4,560	**4,771**
Brynland Avenue	5,149	**4,762**
Avonmouth	1,036	**1,025**
Brislington (Water Lane)	2,638	**2,522**
Rochester Road	1,047	**903**
Frenchay	1,092	**1,020**
Bedminster Down	1,952	**1,865**

Maternity and Child Welfare—*continued.*

	1952	1953
Municipal Infant Welfare Centres (contd.)—		
Durdham Down	4,895	**6,034**
Eastville	1,708	**1,956**
Hotwells	1,772	**1,430**
Newry Walk	1,420	**—**
Redcliffe	1,488	**963**
Sea Mills	1,262	**1,473**
Westbury	2,065	**1,729**
Dovercourt Road and Lockleaze ...	2,970	**2,725**
Fishponds (Guinea Lane)	1,652	**1,370**
Verrier Road	1,660	**1,910**
William Budd	2,971	**3,489**
Ullswater Road	1,741	**1,733**
Lawrence Weston	2,076	**2,705**
Bishopsworth	695	**1,022**
Ashton Vale	113	**814**
Henbury	191	**2,256**
	90,846	**90,439**
Average attendance per session	27.1	**26.5**
Children under 1 year :—		
Central	3,239	**2,629**
Speedwell	4,176	**3,938**
Southmead	3,617	**3,488**
Portway	1,789	**1,718**
Knowle	4,705	**4,547**
South Bristol	5,368	**4,877**
Bedminster	2,700	**3,104**
Barton Hill	1,146	**1,277**
Headley Park	552	**704**
Moorfields	1,749	**1,633**
Brislington (Salisbury Road)	604	**947**
Clifton	2,514	**2,717**
North Bristol	3,800	**4,160**
Brynland Avenue	4,003	**3,685**
Brislington (Water Lane)	2,028	**1,882**
Avonmouth	782	**784**
Brooklea	931	**788**
Frenchay	706	**537**
Bedminster Down	1,586	**1,224**
Durdham Down	3,745	**4,727**
Eastville	1,353	**1,719**
Hotwells	1,260	**981**
Newry Walk	1,019	**—**
Redcliffe	809	**588**
Sea Mills	945	**1,042**
Westbury	1,415	**1,053**
Dovercourt Road and Lockleaze ...	2,284	**2,014**
Fishponds (Guinea Lane)	1,349	**1,196**
St. George (Verrier Road)	1,363	**1,419**
William Budd	2,356	**2,545**
Ullswater Road	1,381	**1,444**
Lawrence Weston	1,742	**2,092**
Bishopsworth	470	**805**
Ashton Vale	74	**670**
Henbury	139	**1,672**
	67,719	**68,606**
Average attendance per session	20.2	**20.0**

Maternity and Child Welfare—*continued.*

	1952	1953	
	1–5 yrs.	1–2 yrs.	2–5 yrs.
Municipal Infant Welfare Centres (contd.)—			
Central	1,646	**569**	**698**
Speedwell	1,865	**1,072**	**821**
Southmead	1,415	**720**	**626**
Portway	1,358	**416**	**540**
Knowle	2,637	**1,111**	**1,478**
South Bristol	3,199	**1,189**	**1,228**
Bedminster	1,047	**470**	**525**
Barton Hill	566	**193**	**231**
Headley Park	523	**107**	**441**
Moorfields	523	**303**	**276**
Brislington (Salisbury Road) ...	268	**120**	**124**
Clifton	1,111	**395**	**459**
North Bristol	1,059	**510**	**438**
Brynland Avenue	1,579	**757**	**849**
Brislington (Water Lane) ...	734	**495**	**288**
Avonmouth	522	**192**	**316**
Brooklea	298	**82**	**171**
Frenchay	521	**181**	**321**
Bedminster Down	829	**449**	**405**
Durdham Down	1,859	**888**	**1,250**
Eastville	368	**260**	**127**
Hotwells	727	**327**	**273**
Newry Walk	691	—	—
Redcliffe	733	**239**	**258**
Sea Mills	510	**274**	**359**
Westbury	784	**451**	**378**
Dovercourt Road and Lockleaze	956	**500**	**368**
Fishponds (Guinea Lane) ...	372	**88**	**78**
St. George (Verrier Road) ...	311	**295**	**197**
William Budd	1,054	**702**	**718**
Ullswater Road	657	**247**	**159**
Lawrence Weston	620	**499**	**561**
Bishopsworth	359	**249**	**359**
Ashton Vale	45	**110**	**132**
Henbury	84	**285**	**758**
	31,831	**14,745**	**16,210**
Average attendance per session ...	9.5	**4.3**	**4.7**
New Patients			
Children under 1 year	5,896	**5,928**	
Children between 1 and 2 years	925	**449**	
Children between 2 and 3 years		**694**	
(vi) *Birth Control* :—			
Attendances	852	**957**	
(vii) *Minor Ailments* :—			
Inspection	2,098	**1,562**	
Treatment	4,080	**2,698**	
New Patients—Inspected ...	1,157	**1,534**	
Treated	1,736	**654**	
(viii) *Relaxation Classes* :—			
Ante- and Post-Natal Exercises	2,485	**3,322**	
New Patients	475	**628**	
(ix) *Sub-Fertility Clinic* :—			
Attendances	548	**712**	
New Patients	139	**181**	

Maternity and Child Welfare—*continued.*

	1952	**1953**
Municipal Infant Welfare Centres (contd.)—		
Backward Children :—		
Attendances	166	**132**
New Patients	31	**18**
Special Diagnostic Clinic :—		
Attendances	789	**740**
New Patients	160	**237**
(d) *Health Visitors :—*		
Visits :—		
Ante-natal	1,833	**2,085**
Primary	6,423	**6,940**
Under one year	29,383	**32,844**
1–2 years	57,035	**26,526**
2–5 years		**40,954**
Eye cases	1,216	**812**
Ophthalmia Neonatorum	21	**43**
Other special visits	6,307	**6,083**
Blank visits	17,160	**19,382**
Problem families	—	**1,022**
Unmarried mothers	307	**419**
Premature babies	3,147	**2,538**
Sessions attended :—		
Clinics	8,200	**8,695**
Nursery schools and classes (hours) ...	2,150	**2,135**
(e) *Inspector of Midwives and Nursing Homes :—*		
Visits :—		
1. Midwives Acts—		
Routine	163	**127**
Special	183	**271**
2. Home conditions	116	**154**
3. Blank visits	130	**177**
4. Nursing Homes (Routine)	31	**26**
5. Nursing Homes (Special)	16	**13**
6. Midwives cases	271	**348**
(f) *C.M.B. Forms :—*		
A. Medical Help	385	**330**
B. Death (Neo-Natal)	2	**6**
C. Stillbirth	13	**9**
D. Laying out of the dead	21	**6**
E. Liability of infection	7	**7**
F. Artificial feeding	342	**419**

Table 2—Maternity and Child Welfare—Welfare Department.

	1952	1953
Cases on Register at beginning of year	3,169	**3,525**
,, added	356	**325**
,, removed	—	—
,, on Register at end of year	3,525	**3,850**
Applications received :—		
(a) Unmarried mothers	308	**301**
(b) Married women	49	**24**
Affiliation Cases completed :—		
(a) Orders obtained	42	**48**
(b) Agreements arranged	18	**17**
Maintenance Orders (Married Women)	9	**10**
Assisted in application for arrears on orders	225	**123**
And on varying Orders	17	**30**
Admitted to homes :—		
(a) Expectant mothers	61	**45**
(b) Mothers with babies	37	**34**
Visits—Domiciliary :—		
(a) Ordinary	719	**386**
(b) After-care	900	**550**
Blank Visits	248	**105**
Interviewed in hospital or homes ...	913	**840**
Total receipts	£13,161	**£13,548**
,, disbursements	£13,100	**£13,530**

Table 3—Sunlight Treatment.

Central Clinic	1952	1953
Artificial Sunlight—		
New Patients—		
Adults	14	—
Schoolchildren	579	**460**
Pre-schoolchildren	586	**359**
Treatments—		
Adults	112	—
Schoolchildren	6,251	**4,747**
Pre-schoolchildren	4,657	**3,571**

Table 4—Eye Clinic.

	New Patients		Attendances	
	1952	1953	1952	1953
Schoolchildren	1,567	**1,286**	8,208	**6,465**
Pre-schoolchildren	101	**86**	404	**363**
Adults	—	—	—	—
Totals ...	1,668	**1,372**	8,612	**6,828**

Table 5—**Orthopædic Department.**

	Patients		Attendances	
	1952	**1953**	1952	**1953**
Inspections :—				
M. & C. W.	154	**144**	225	**214**
School	746	**768**	1,178	**1,181**
Totals ...	900	**912**	1,403	**1,395**
Treatment :—				
M. & C. W.	51	**31**	1,377	**886**
School	339	**299**	5,440	**5,771**
Totals ...	390	**330**	6,817	**6,657**

Table 6—**Foot Clinic.**

	Patients		Attendances	
	1952	**1953**	1952	**1953**
M. & C. W.	—	**3**	—	**7**
School	833	**896**	3,844	**3,777**
Totals ...	833	**899**	3,844	**3,784**

Table 7—**Ear, Nose and Throat Department.**

	Patients		Attendances	
	1952	**1953**	1952	**1953**
Inspections :—				
M. & C. W.	75	**80**	93	**103**
School	957	**1,117**	1,983	**1,912**
Totals ...	1,032	**1,197**	2,076	**2,015**
Treatment :—				
M. & C. W.	8	**10**	109	**127**
School	170	**129**	3,375	**2,678**
Totals ...	178	**139**	3,484	**2,805**

Table 8—**X-Ray Department.**

	Film		Screen		Total	
	1952	**1953**	1952	**1953**	1952	**1953**
Central Health Clinic:—						
Chest	8,153	**2,406**	7,085	**2,070**	15,238	**4,476**
Schools	1,262	**2,761**	—	—	1,262	**2,761**
M. & C. W. ...	1,356	**3,421**	—	—	1,356	**3,421**
Others	2,000	**2,524**	—	—	2,000	**2,524**
Totals ...	12,771	**11,112**	7,085	**2,070**	19,856	**13,182**

As from April 1st, 1953 the S.W. Regional Hosp. Board X-Ray Unit at Central Clinic has been in full operation and this has greatly reduced the numbers of Chest X-Rays, etc. undertaken by the Local Authority Unit.

Table 9—**Scabies Baths.**

	Central Health		Southmead		Feeder Road		Totals	
	1952	**1953**	1952	**1953**	1952	**1953**	1952	**1953**
School Children ...	216	**156**	12	—	—	**1**	228	**157**
Children under 5	98	**74**	2	—	—	—	100	**74**
Adults—								
Females	116	**109**	—	—	—	—	116	**109**
Males	—	—	—	—	61	**58**	61	**58**
Total Attendances...	430	**339**	14	—	61	**59**	505	**398**
**New Patients :—*								
School Children ...	120	**85**	8	—	—	**1**	128	**86**
Children under 5	54	**37**	1	—	—	—	55	**37**
Adults—								
Females	66	**58**	—	—	—	—	66	**58**
Males	—	—	—	—	37	**32**	37	**32**
Total New Patients...	240	**180**	9	—	37	**33**	286	**213**

* Included in " Total Attendances."

Table 10—**Dispensary.**

(1) Establishments served :—		**1953**
Health Centres and Clinics (35)		
Residential Institutions (26)		
Day Nurseries, Day Special Schools; Nursery Schools and Classes (37)		
Other Establishments (15)		
Municipal Midwives (49)		
School first aid sets (526)		
Gas and air apparatus servicings (1,891)		
(2) Turnover of Drugs, Dressings, etc. :—		
Quantity of mixtures made	gallons ...	**611**
,, ,, ointment made	lbs.	**548**
Vit. A. & D. Emulsion	gallons ...	**58**
Vit. A. & D. Capsules	caps.	**75,000**
Whooping Cough Vaccine	c.c.	**4,210**
Whooping Cough/Diphtheria Vaccine	c.c.	**4,200**
P.T.A.P. Diph. Proph.	c.c.	**7,655**
Other Medicines dispensed	gallons ...	**281**
Powders	lbs.	**23**
Lint and Cotton Wool	lbs.	**1,649**
(3) Bulk purchase of Drugs :—	lbs.	**3,350**
	gallons ...	**109**
	tabs.	**910,000**

Table 11—**Diphtheria Immunisation.**

	1952	**1953**
Diphtheria—Number of immunisations completed at Schools, Clinics and Nurseries and by General Practitioners during the year.		
Full course—Ages 0—5 years	4,539	**4,199**
Ages 5—15 years	199	**1,141**
Booster dose —15 years	3,917	**4,850**

Table 12—**Day Nurseries.**

No. on Register 31.12.52	No.	Places Provided 31.12.53	No. added to Register	No. removed from Register	No. on Register 31.12.53	Waiting List
259	**7**	**290**	**290**	**303**	**279**	**11**

Table 13—Care and After-Care, Nursing Appliances Equipment for Loan.

Items	No. on Loan at 31.12.53
Air rings	524
Air beds	39
Bed blocks (prs.)	3
Bed pans	464
Bed pulley	13
Back rests	383
Bed tables	3
Breast pump	3
Commodes	51
Cradles	41
Crutches (prs.)	15
Feeding cups	34
Fracture boards	24
Mattresses—Dunlopillo	6
Rubber sheets	506
Sand bags	—
Sputum mugs	57
Steam kettles	4
"T" sticks	10
Urinals—male	189
Urinals—female	70
Wheel chairs	72
Worral Walking Aid	5
Douche Cans	3
Total	2,519

2. SPECIAL FAMILIES

The powers under Section 52 of the Bristol Corporation Act, 1950, relating to special families, have been delegated to the Health Committee. This Section gives authority to provide training and recuperation centres, to employ home advisors and to supply furniture and furnishings to necessitous families.

In July 1950, a joint circular was issued from the Home Office and the Ministries of Health and Education, relating to children neglected in their own homes. The Council were asked to designate a Chief Officer to co-ordinate this work, and the Medical Officer of Health was so designated. The Circular further suggested that local committees should be set up. The problem of child neglect is so bound up with that of special families, that it was decided that a Committee of Chief Officers with certain co-opted members, which dealt with special families, should also deal with child neglect. This Committee, which meets each month, has proved valuable in ensuring an agreed policy, and in avoiding unnecessary overlap. The Family Service Unit started work in the city in April 1953, under the direction of Mr. A. Strange, who is assisted by two women case workers. The Unit live on the Southmead Estate. It is considered that probably the only hope of rehabilitation of many of the special families lies in the intensive help and support given by teams such as Family Service Units.

In March 1953, Sister Laver was appointed by the Health Committee, as liaison health visitor for special families. Sister Laver co-ordinates the work of the Health Visitors in connection with these families. She co-operates with the Family Service Unit, advising on problems of health and child care. In addition, she carries a case load of about 16—20 families, who need concentrated assistance. In these cases, help is given with budgeting, homecraft, simple dressmaking, cooking and baby care. Standards of health in these families is often low and arrangements have sometimes to be made to accompany mothers and perhaps children to the family doctor, hospital or clinic. The father is always seen, in order to enlist his co-operation in raising the standards of the home. Where there are several children under school age, their health is greatly improved by admission of the older ones to a Day Nursery or Nursery School.

During the year, five families were sent to the Brentwood Rehabilitation Centre, Cheshire. These families have been subsequently followed up by either the Family Service Unit, or by Sister Laver, in order to encourage the mothers to put into practice what they have learnt at the Centre. In addition, some mothers and young children have been provided with a short period of recuperative convalescence at certain holiday homes in the region.

Progress has been made during the year in re-housing some of the special families. Penpole and Purdown camps have both been closed. Co-operation is maintained with the Council of Social Service who have a full-time social worker residing in both the Knowle West and Southmead areas.

Mr. A. Strange, organiser of the Bristol Family Service Unit, gives the following report of the work of the unit :—

Bristol Family Service Unit

(*Report on year ended* 31.3.54)

The Unit was set up in April 1953 and during the twelve months it has been operating it has been in contact with 37 families. At the end of the year it was working with 29. In addition to its regular case-load a number of enquiries have been dealt with.

The staff consists of a fieldwork organiser and two caseworkers working from a residential centre provided by the local authority. Throughout the year there has been a steady intake of cases, the majority coming through the Special Families Committee, whilst referrals has been made by general practitioners, National Assistance Board, Probation Department, Children's Department, T.B. Welfare, Schools Medical Service and an Estate Tenants Association.

The work has been directed towards arousing in the parents a desire to improve conditions and standards in the home and to support them in solving their own problems and meeting their responsibilities. In order to avoid resistance being set up arising from misunderstanding of its function, the Unit has always endeavoured to ensure that from the family's angle it is in a position to offer some positive service at the time of referral.

The girl workers have maintained close contact with the mothers and in many cases have done a considerable amount of practical work in the homes. During periods when the mothers have been in hospital, or otherwise incapacitated, they have co-operated with the home help service, and thus ensured that the children remained at home. Apart from the actual practical value of this service to the family, such experience enables the case-worker to observe more accurately the relationships within the family, and thus to be in a much stronger position to advise and help them or, if necessary, to suggest specialist advice or treatment.

Parents frequently visit the Unit centre where informal interviews take place, and on other occasions interviews of vital importance to the case-work may be arranged away from the distractions of the home atmosphere.

Many families are found to be generally unhappy in their environment, and often they have been rejected by their parents and immediate relatives, or have lost contact with them. They have few or no friends in the locality in which they reside, and in this setting the case-worker is accepted as a friend offering informal education in domestic matters and opening up new interests. In a few cases the Unit has been able to introduce selected voluntary workers who visit regularly, thus stimulating social life within the home.

The use of a male worker in some cases has proved valuable in enlisting the support and interest of the husband and encouraging him to become an active participant in the case-work policy.

In practically all cases notices to quit have been served at some time during the past, and in at least 50% eviction orders have been made. In areas in which the families reside, and particularly on the housing estates the stimuli or pressure to spend are considerable. In instances where rent arrears have accrued to the point where eviction and the consequent break-up of the home seemed imminent, the Unit has arranged to collect the rent weekly over a period and later passing the responsibility back to the family. Assistance has also been given in solving some of their other financial problems, for example, gas, electricity, and hire-purchase arrears.

The results of the Unit's work may be judged by the more tangible evidence, for example, general conditions and standards in the home, financial management, physical care of the children, husband's employment record, and so on. Whilst it would claim results in these directions, the Unit feels that the main value of case-work should be assessed by the degree of change achieved in the atmosphere within the home, with the resultant provision of greater security for the children. The introduction of a case-worker inevitably affects the home situation as a new set of relationships is set into motion. Much depends on the personality and quality of the case-worker, and the mentality and intelligence of the case, in assessing how much may be achieved in assisting them to gain insight into their problems and supporting them through sustained effort towards rehabilitation.

3. NURSING AND AUXILIARY SERVICES

by L. M. Bendall (*Chief Nursing Officer*)

(I) HEALTH VISITING SERVICE

The health visitors work is divided into two main sections.

1. Home Visitation.
2. Work in clinics and Nursery Schools and classes.

It is, I think, important to state that the health visitor is also the school nurse and a part of her time is therefore taken up with school medical work which is not included in this report. (See Section F).

In the same way work of health visitors with regard to blindness, special families and old people's health and welfare is reported upon elsewhere in this report Prevention of Illness, Care and After-Care. (Section B).

Classification of Visits

	1953
Maternity and Child Welfare ...	105,802
Special	12,037
	117,839

Home Visitation

This should be regarded as the corner stone of the health visitor's work, and it is fair to say that the health visitor is slowly and surely consolidating her position as a medico-social worker.

It is, also, interesting to report that she is building up a closer relationship with the family practitioner. This is especially fostered where the general practitioner works in the various clinics in the city.

The basis of the health visitor's work is still the home visitation of children under the age of five years, and the birth of a baby is her handle of admission into the home which undoubtedly is the place where her best work is done. Here, the mother is seen in her own environment, she is less nervous and therefore more receptive to advice.

The health visitor, however, also pays special visits to homes in connection with old people, housing, overcrowding, follow-up of cancer cases and other miscellaneous visits.

Because of the widening of the scope of the health visitor's work, a method of selective visiting of children under five years is in operation. This means that the health visitor uses discretion as to the frequency of visits, more visits obviously being paid to homes where babies and young children are failing to make progress or where there is any question of partial or complete neglect.

An additional health visitor (making a total of 3) was seconded during 1953 to old peoples' welfare work. This became necessary owing to the tremendous increase in the number of old people brought to our notice.

In 1953 a health visitor was appointed to specialise in Problem Families. This has been a most worth-while appointment, and Sister Laver—the health visitor appointed to this post reports as follows :—

> " My duties as Problem Families Health Visitor commenced in March 1953.
>
> A register of cases was compiled—these cases were referred by the district health visitors—and the total on the register was 41.
>
> In 1953, 14 families were visited in conjunction with the Family Service Unit ; 40 families were visited together with the district health visitor ; and 15 cases were given constant supervision and they were helped and advised with budgeting, simple dress making, knitting, menus and in other matters.
>
> Where necessary, patients have been taken to the doctor and to hospital.
>
> Close contact has been established with both statutory and voluntary bodies, such as, probation officers, N.S.P.C.C., Housing department, hospital almoners, sanitary inspectors, Children's department, Education Welfare department and general practitioners.

There has also been a follow-up of families where the mother has spent a training period at Brentwood Rehabilitation Centre."

Surveys

This report would not be complete without a reference to the valuable work which is being done by the health visitors in connection with surveys, and an appreciation of their co-operation in the training of health visitors, and doctors, student teachers and other students.

Work in Clinics

The function of the health visitor in the clinic is to be responsible for the administration and in addition to give advice and health education. She has been relieved of all routine duties by State Registered Nurses who do not hold the Health Visiting Certificate.

Health Education is carried out in two ways :—

1. By individual teaching.
2. By group teaching.

It is interesting to record that the health visitors are very alive to their responsibilities in this direction and the amount of group teaching given is increasing very considerably, some health visitors being most adept at using the film projector and film strips to illustrate their talks.

These talks are given mainly to mothers at Infant Welfare Centres and also to mothers attending Ante Natal Clinics.

A pilot experiment has been carried out in two clinics in connection with parentcraft classes in which the health visitor, midwife and nutritionist have taken part. These talks have been given in the afternoon with the exception of two which have been held in the evenings. Fathers have been invited to attend the evening classes and the response has been gratifying.

It is hoped to extend these Parentcraft classes during the coming year to all Ante Natal Clinics.

Work in Nursery Schools and Classes

The health visitor pays regular visits to nursery schools and classes, keeping the children under observation and treating minor ailments. She also attends at the medical inspection with the doctor.

Refresher Courses

A University refresher course was held in October 1953. Twenty health visitors attended and the course was very much enjoyed.

Two health visitors attended a refresher course at Bedford College, London in December. This course was arranged by the W.P.H.O.A.

Establishment

The establishment of Health Visitors at the end of 1953 was as follows :—

64 Full time Health Visitors.
4 Part time Health Visitors.
6 Temporary Health Visitors under contract.

Of these 9 were Clinic Sisters and 7 carried out visiting of a specialised nature as follows :—

1 Welfare of the Blind.
1 Control of notifiable diseases.
1 Premature Baby visiting.
1 Problem families.
3 Old Peoples' Welfare.

New Appointments.

5 Full time Health Visitors.

Resignations.

7 Full time Health Visitors.
2 Part time Health Visitors.

Causes of Resignations.

Full time	3 Marriage. 2 To take a post nearer home. 1 To go back to hospital. 1 To take Queen's training.

Part time — 2 Health grounds.

Tuberculosis Visitors

During 1953 an establishment of 7 Tuberculosis visitors was maintained until November when one left to go back into hospital.

They divide their time between home visiting and clinic duties in the Tuberculosis department. The clinic work has increased quite considerable during the year. This has automatically reduced the amount of visiting time at their disposal.

During 1953 a total of 8,199 visits were paid to tuberculosis households.

Clinic Staff

Nursing staff (apart from health visitors), who work in the various clinics in the city, include clinic nurses, physiotherapists, dental attendants, adult helpers and clinic assistants.

Clinic Nurses

At the end of 1953 the establishment of clinic nurses was :—

Full time	5
Sessional	30

These nurses have completely relieved the health visitors of routine clinic duties.

Physiotherapists

Establishment ...	3

These physiotherapists are completely occupied in carrying out artificial sunlight, remedial exercises, massage and relaxation.

It is desirable here to point out the great increase in the number of relaxation classes offered to expectant mothers. These classes are well attended.

Dental Attendants

A full establishment of dental attendants has been maintained during the year.

Adult Helpers

Similarly an establishment of adult helpers has been maintained during the year.

These helpers carry out treatment for scabies, cleansing of verminous heads, assist in treatment of minor ailments, and frequently act as escorts in taking children to residential schools and nurseries.

Clinic Assistants

At the end of 1953 there were 41 Clinic Assistants employed by the department.

During 1953, sixteen left for the following reasons :—11 to train as nurses ; 2 to train as physiotherapists ; 2 on health grounds ; 1 to take another post.

Clinic Assistants work in the various departments of health clinics in order to fill in the gap between school leaving and entry into training.

It is interesting to record that we have on the permanent staff of health visitors and midwives, nurses who commenced their nursing career as clinic assistants with this department.

(II) HOME NURSING SERVICE, 1953

by Miss G. M. Grazier (*Senior Superintendent, Bristol District Nursing Association*)

Nursing Staff

On December 31st 1953 there were 100 nursing members on the staff made up as follows :—

60	Queen's Nursing Sisters (including 7 Male Nurses).
10	State Registered Nurses.
14	State Enrolled Assistant Nurses.
7	Part Time State Registered Nurses.
9	Student Queen's Nurses.

Statistics

The number of patients and visits show an increase of 562 and 8,796 respectively during 1953 but the biggest increase continues to be in the number of injections given—this shows a rise of 12,696 injections and is an indication of the extent to which the general practitioners are using the new drugs.

Training Home

During the year 18 students have entered for Queen's Training. Six of these were sent by the local authorities of Somerset, Devon, Dorset, and the Isle of Wight. Two did not complete the course, one was an independent student, and nine have remained on the staff.

Liaison

The administrative staff, nursing and secretarial wish again to express their thanks to the Medical Officer of Health, his deputy, the Chief Nursing Officer and other members of his staff for help and co-operation at all times.

BRISTOL DISTRICT NURSING ASSOCIATION

Table 14—**Nursing Statistics.**

1st January—31st December.	1952		1953	
Number of Cases on books 1st of January ...	1,326		**1,464**	
Number of New Cases attended during year	8,651		**9,075**	
Total ...	9,977		**10,539**	
Cases sent by :—				
Doctors	6,548		**7,104**	
Hospital Authorities	949		**1,083**	
Maternity and Child Welfare Authorities	50		**70**	
Employers	1		**1**	
Brought to notice of Nurse	21		**25**	
Applications made by Patients' Friends	1,082		**792**	
Cases :—				
Convalescent	4,477		**4,631**	
Transferred to Hospital	1,359		**1,386**	
Deaths	989		**1,138**	
Removed for other causes	1,688		**1,776**	
Remaining on books 31st December ...	1,464		**1,608**	
	New Cases	Visits to Old & New	New Cases	Visits to Old & New
Analysis of Cases :—				
Pneumonia	29	374	**17**	**173**
Measles	7	74	**13**	**107**
Whooping Cough	6	47	**3**	**38**
Tuberculosis	177	6,231	**217**	**6,887**
Other Notifiable Diseases	20	176	**21**	**182**
Mumps	—	—	**1**	**4**
Influenza	45	259	**95**	**919**
Chicken-Pox	2	17	**6**	**63**
Other Infectious Diseases	15	136	**14**	**150**
Other Diseases occurring in children under 5 years of age	291	1,797	**319**	**2,066**
Complications of Pregnancy and Puerperium	18	138	**19**	**153**
Miscarriages	26	205	**29**	**211**
Breast Abscesses	78	976	**92**	**923**
Pernicious Anaemia	129	5,671	**92**	**6,046**
Rheumatoid Arthritis	156	13,391	**136**	**12,321**
Diabetes	230	52,848	**264**	**56,005**
Respiratory Diseases (inc. Bronchitis) ...	1,150	14,330	**1,537**	**18,233**
Diseases of Blood Vessels (inc. Strokes)...	569	21,316	**518**	**20,826**
Urogenital	179	6,149	**157**	**5,835**
Varicose Ulcers	100	10,545	**115**	**9,870**
Heart Disease	796	28,095	**875**	**33,742**
Disease of Nervous System	72	4,800	**73**	**4,584**
Gastro Intestinal	1,126	6,843	**1,193**	**6,229**
Cancer	439	16,281	**406**	**15,380**
All Other Diseases	2,991	48,891	**2,863**	**47,439**
Total number of visits paid to all cases ...	239,590		**248,386**	
Night calls — visits between 8 p.m. and 8.30 a.m.		732		**803**

(III) THE HOME HELP SERVICE, 1953

by Miss P. Walton (*Home Help Organiser*)

The demand for home help continues, particularly for the elderly and infirm, and the service has increased steadily during the past twelve months. Medical science has prolonged life and the problem of the aged is becoming more acute each year as the population grows more top heavy. So many old folks have no one to care for them and the position is desperate during the winter months when they are ill with acute bronchitis, pleurisy, pneumonia and so on, and there are nothing like the hospital beds available to cope with them. Every home help is employed for every hour she is willing to help, and in acute illness goes for one hour in the morning to light the fire, give the patient a hot water bottle, get her some food and make her as comfortable as possible. The home nurse calls to give injections etc., and the home help returns for two hours at lunch time and again for an hour during the late afternoon. This is by no means ideal, especially as many patients should have someone there day and night, but at least the patients are not left to die of neglect.

With the ever improving health service more pre-natal and post-natal cases are referred here for help, and there has also been an increase in the number of post-operation and emergency illness cases. There has been considerable co-operation with the Family Service Unit which is now working on one of the city housing estates.

Training Course

The home help training course has continued throughout the year, and has proved very beneficial ; about two thirds of the home helps have now attended and the talks are likely to continue indefinitely as the establishment grows.

A Morning's Work in the Life of a Home Help Organiser

Perhaps the following brief description, in note form, of a morning in the life of an Organiser would give some idea of the difficulties encountered.

At 9 a.m. a midwife telephones to say that she has delivered a baby and could the home help go at once as the mother is alone in the house with two other small children. A few minutes later another midwife telephones—send two home helps on their way to these cases. A doctor telephones—he has been called to a mother who has pneumonia and there are four children under school age with no one to care for them.

A health visitor calls next, who has a problem family to cope with. The mother has agreed to go to hospital for pre-natal treatment provided a home help is sent to care for the children.

Another telephone call, this time from a district nurse. She has been to an old lady who is receiving two hours help daily, but she has had another stroke and could she possibly have more hours each day, plus Sundays, until a bed can be found in hospital.

The post arrives with five medical certificates from home helps who are ill. That means twelve urgent cases needing replacement. Ah ! thank goodness Mrs. Smith and Mrs. Jones are now fit for work—that will cover some of the most urgent cases. Three pathetic letters from old people begging for more hours. Of course they ought to have it, but where is it to come from ? A letter from a married son living outside the city and asking for help for his aged parents in Bristol, as his mother has acute bronchitis.

Another interruption—a home help has called to say that when she went to her case she was told by the neighbours that the old lady died yesterday. No time to feel sorry—send the home help to one of the cases where the usual helper is off sick.

Return to the post. An appeal against an assessment ; a letter from a home help asking for a day off as she has to take her child to see a specialist. Oh dear ! old Mrs. X has again fallen out with her home help—she is a cantankerous old woman.

Another doctor on the telephone about a mother with a threatened miscarriage and a small child of eighteen months. Telephone for transport to take a home help from another case and take her to this mother.

An almoner next who has a patient who does not now need nursing attention and who can go home if help is provided. The bed is urgently required for another patient.

Break off to give a short talk on the service to some overseas visitors who are in the city to study the health services.

Whilst giving the talk five new applications for help have been taken over the telephone :—an old lady of 96, partially sighted and living alone, two aged couples and two more emergency cases.

Just returning to the post when an old lady arrives to complain that the home help has refused to do her shopping. After ten minutes' discussion I hope she is convinced that the home help is only there for two hours to do her cleaning, that she cannot spend another two hours shopping, especially as the old lady is quite capable of going to the shops herself.

Two letters from mothers about the home help service as they are being confined at home ; one from a home help who says she cannot put up with her patient's dirty habits any longer and could she have a change ; one from the City Treasurer saying a patient has run into debt, and last but not least, a warm letter of appreciation from a mother who was confined to bed with toxaemia, had her baby and is now fit and well again.

The health visitor for the aged arrives with a request that the times allotted to an old couple should be changed and increased, as they are now both ill and in bed. This entails changing the programmes of three home helps with the resultant entries on case papers, notifications to home helps and patients and so on. She is also concerned about a senile old man living in filthy conditions, who refuses to go into a home and the sanitary inspector feels a compulsory removal order will have to be made unless something can be done. Arrange that when possible two home helps will go there for a day to do the initial " clean up " before a regular home help attends.

Having dealt with the above matters the Organiser, feeling somewhat dazed, collects her visiting list and sets off to cover as many cases as possible before returning to the office at about 3.45 p.m. to deal with new cases, messages etc., which have come in during her absence and to allocate home helps to the cases visited.

Statistics

The following are the statistics for the year :—

Number of Home Helps employed.

Full Time ...	20
Part Time ...	295
T.B.	26
	341

Home Helps, 1953—Cases attended

Type of Case	New Cases	Total Cases	Cases being attended at end of year 1953	Case Hours			
				Full Cost	Part Cost	Free	Total
Confinements ...	179	183	13	4,707	7,695	698	13,100
Young children	174	189	12	3,940	6,851	3,481	14,272
Acute sickness	123	131	18	2,440	3,036	2,000	7,476
Aged and infirm or chronic ...	541	1,266	982	1,696	69,113	169,101	239,910
Tuberculosis ...	35	70	47	751	6,175	8,043	14,969
Totals	**1,052**	**1,839**	**1,072**	**13,534**	**92,870**	**183,323**	**289,727**

4. DENTAL CARE

by W. H. B. Stride (*Senior Dental Officer*)

(I) MOTHERS AND YOUNG CHILDREN

Dental examination was carried out for expectant and nursing mothers and young children at the five main health centres during the year. Three hundred and twenty-eight sessions were devoted to that side of the work.

Treatment is offered to those selected by the doctors at ante-natal and post-natal clinics, and to patients requesting treatment or sent up by the nursing staff and health visitors. Emergency treatment is available at all times.

The number of mothers inspected was 888 as against 940 last year. The number treated was 591 and although this was 76 less than last year, the actual number of attendances was 2,237 as against 1,988 last year.

Staff

The staff of full-time officers was reduced to six by the death of Mr. A. L. Morgan last November. He had been a member of the staff since 1924 and his death was a big loss to the service.

The number of part-time sessions given by private practitioners averaged 11 per week up to the end of the year. It will be seen that the staffing difficulties are still very acute and our hopes of filling up the gaps in the service have not been fulfilled, as it has not been possible to get any full-time officers.

In view of this, every effort is being made to get more part-time help from private practitioners to enable us to carry on this priority work.

Dentures

Provision has been made for the supply of dentures and 92 mothers have attended during the year. One hundred and thirty-nine dentures have been supplied in addition to some repairs.

Oral Hygienist

The post of oral hygienist which has been vacant since last September, when Miss Lewis resigned, was filled by the appointment of Miss J. Wells in January. She has now joined the permanent staff. Six hundred and thirty-five scalings and gum treatments have been carried out during the year. The instruction in oral hygiene is of special importance at this time as oral conditions are often neglected, and mothers are apt to attribute their loss of teeth to pregnancy rather than their own neglect.

(II) DENTAL CARE OF SCHOOL CHILDREN

A short report of the dental care of school children is contained in the report on the School Health Services under Section F.

DENTAL DEPARTMENT

(a) Numbers provided with dental care

	Examined		Needing Treatment		Treated		Made Dentally fit
	1952	**1953**	1952	**1953**	1952	**1953**	**1953**
Expectant and nursing mothers	940	**888**	917	**872**	667	**591**	**545**
Children under 5	2,661	**2,161**	2,594	**2,072**	2,601	**2,141**	**1,920**

(b) Forms of dental treatment provided

	Expectant and Nursing Mothers		Children under five	
	1952	**1953**	1952	**1953**
Extractions	1,541	**1,318**	3,583	**3,014**
Anæsthetics—Local	81	**83**	5	**21**
Anæthetics—General	527	**488**	1,998	**1,614**
Fillings	381	**285**	145	**152**
Scaling and gum treatment	635	**1,015**	—	—
Silver nitrate treatment	—	—	1,066	**1,003**
Dressings	172	**166**	—	—

5. THE MENTAL HEALTH SERVICES

by H. Temple Phillips (*Chief Assistant Medical Officer*) *and* F. Morton (*Supervising Officer*)

INTRODUCTION—A RETROSPECT

A casual perusal of annual reports for successive years may give the impression that little change is taking place in the mental health field. Such an assumption would, however, be untrue ; progress may have been slow, but over the years it has added up to an impressive sum-total of achievement. For this reason, it has been thought fitting to include as an introduction to this report, a short historical review of the development of mental health services in Bristol.

Undoubtedly the greatest advance in mental health in recent years has been the growing realisation of the importance of prevention—not only of the grosser forms of mental illness, but also of those minor indispositions of the mind which are so common, and which so often masquerade under the cloak of physical illness. This change of attitude has produced, perhaps, little tangible result as yet, but it is a problem with which all workers in the mental health field are very much occupied, and it is in such a direction that development is to be expected in the near future.

From very remote times the distinction between those with an inborn mental defect (mental defectives) and those suffering a lapse from the normal (persons of unsound mind) has been clearly recognised.

(I) Mental Deficiency

Prior to 1913, the date of the first Mental Deficiency Act, there existed in Bristol two special schools for mentally defective children, and one for the physically handicapped. They were governed by a Special Schools After-Care Committee.

In 1914, when the Mental Deficiency Act of 1913 became operative, a special committee was appointed to carry out the duties which the Act imposed. This Committee consisted of representatives of the Bristol City Council, the Visiting Committee for the Mental Asylum, the Education Committee, and the Board of Guardians, together with certain other persons having special knowledge with regard to defectives. Owing to the outbreak of the first World War, the committee, although appointed in 1914, did not function fully until 1919.

In 1916, the Bristol Voluntary Association for Mental Welfare was formed and later pioneered many of the schemes which have brought Bristol well to the fore in the care of mental defectives. The Voluntary Association undertook the statutory supervision of defectives who had left special schools, and was also responsible for providing training for defectives who had been excluded from school.

In 1924, the Voluntary Association opened the first occupation centre for feeble-minded girls, at 63, Barton Hill Road, in a room rented from the Warden of the University Settlement. This was followed a few months later by a second occupation centre at Bedminster. The success of this training scheme resulted in an expansion of the project, and in 1925 a centre for junior boys was opened at Broad Weir School, and an industrial centre for men and boys established at 15, Park Row.

Defectives requiring a stricter degree of care and control than could be provided by statutory supervision or guardianship were accommodated in institutions under the care of the Board of Guardians. Many of these institutions were unsatisfactory, and the City Council, realising its responsibility and foreseeing the needs of a modern institution, put into operation the building of Hortham Colony at Almondsbury. The Colony, with accommodation for 600 patients, was equipped with every modern convenience for the care and training of mental defectives, the first patients being received there on the 16th November, 1931.

The Mental Deficiency Act of 1927 made it a statutory duty for local authorities to provide occupation and training for mental defectives.

Towards the end of 1932 all grants payable to the Voluntary Association for Mental Welfare ceased, and on 1st April, 1933, the work previously carried out by that Association was taken over by Bristol Corporation.

As time went on the Occupation Centre premises became increasingly inadequate, necessitating removals from time to time and for various reasons to other premises, and, in 1942, the various projects were finally centralised at Marlborough House. On these premises attendances have steadily increased, until there is now a register of over 200 children receiving daily training.

(2) Mental Illness

Until the 18th century there was no Statute for the detention of lunatics (as they were then termed), the whole procedure depending upon common practice. The Act of 1743 provided for the apprehension of any dangerous lunatic—" to be kept safely locked up in some secure place, and if necessary, there chained."

Pauper lunatics of the city were lodged in St. Peter's Hospital ; patients with means in a private asylum at Fishponds. Although the suitability of these various premises had long been questioned, it was as a result of deplorable conditions disclosed in a special enquiry, that the City Council, in January, 1854, took upon itself the duties of managing the local asylum previously imposed on the magistrates.

In 1855, following representations made by the official inspectors, the Government insisted upon an asylum being built in the suburbs, and the first Bristol Mental Hospital was opened at Fishponds in February, 1861. In the succeeding years the number of patients increased, and additions were made to the hospital. With improved forms of care, however, its design proved most unsatisfactory—particularly in the very large size of its wards.

With the introduction of the Mental Treatment Act of 1930, which provided for the voluntary admission of patients suffering from milder forms of mental illness, the need for more suitable accommodation became evident. The City Council purchased a site at Barrow Gurney for the erection of a modern mental hospital. Barrow Hospital was opened in 1938, but owing to the outbreak of war, was requisitioned by the Royal Navy in 1939. The hospital was re-occupied by civilian patients in 1947, and is now recognised as one of the leading mental hospitals in the country, having extensive laboratories, and equipment for all modern forms of treatment.

BRISTOL MENTAL HEALTH SERVICE TODAY

In 1948, with the introduction of the National Health Service, the control of the Mental Deficiency Colony at Hortham and of the Bristol Mental Hospital was transferred from the Local Authority to the Regional Hospital Board.

The City Council, as Local Health Authority, delegated their powers under the Mental Deficiency Acts and the Lunacy and Mental Treatment Acts to the Health Committee, who, through the Mental Services Sub-Committee, set up a comprehensive Mental Health Service for the prevention, care, and after-care of mental illness.

This service, with its headquarters at Marlborough House, has seven main sections, co-ordinated by a Medical Director of Mental Health. The work of these sections falls into the following categories :—

(1) Mental Deficiency Service.
(2) Occupation Centre.
(3) Industrial Centre.
(4) Duties under Lunacy and Mental Treatment Acts.
(5) After-Care Service.
(6) Diversional and Social Therapy Unit.
(7) Mental Health Advisory Centre.

Officers are on duty at all times, maintaining a continuous day and night service. A fuller account of the various services is given in the remainder of the report.

(1) Administration

During the year under review, the Mental Services Sub-Committee has held monthly meetings. Alternate meetings have been held at Marlborough House, affording members the opportunity of inspecting the Occupational and Industrial Centres, and of maintaining close contact with the problems of administration. Thanks are expressed to all members for their keen interest in all sections of the work.

Staff Establishment

The approved establishment of the department stood as follows :—

	Establish-ment	*Staff at* 31.12.53
(a) *Medical.*		
Chief Assistant Medical Officer of Health as Director	1	1
Assistant Medical Officers employed part-time	5	5
General Practitioners employed part-time for certification and other duties in relation to Lunacy and Mental Deficiency ...	2	2
(The services of a consultant psychiatrist are also available for the examination of difficult and obscure cases).		

Staff Establishment—continued

	Establishment	*Staff at 31.12.53*
(b) *Administrative and Supervisory.*		
Supervising Officer (duly authorised) ...	1	1
Assistant Supervising Officers (duly authorised)	6	6
Mental Health Visitors (full-time)	2	2
Clerks	6	6
(c) *Professional and Technical.*		
Psychologist (part-time)	1	–*
Nursing Sister (part-time)	1	1
Psychiatric Social Worker	1	–
Speech Therapist (part-time)	1	1
Teacher of the Deaf (part-time)	1	–
Occupation Centre Supervisor	1	1
Deputy Occupation Centre Supervisor ...	1	–
Occupation Centre Assistant Supervisors (full-time)	8	8
Occupation Centre Assistant Supervisors (part-time)	–	1
Industrial Centre Senior Instructors	1	1
Industrial Centre Junior Instructors	2	2
(d) *Others.*		
Handyman Caretaker (resident)	1	1
Guides (part-time)	5	5
Domestic helpers (part-time)	2	2

* Services of Psychologist of Child Guidance Clinic of Education Committee are used if need arises.

Staff Changes

Dr. H. Temple Phillips was appointed Chief Assistant Medical Officer (and Medical Director of Mental Health Services) on 1st April, 1953. This post had been vacant since early in 1952.

We are pleased to report the appointment during the year of Mrs. Grace Milsom to the post of Occupation Centre Supervisor, following her successful completion of a course of training, which resulted in her gaining the Diploma for Occupation Centre Supervisors of the National Association for Mental Health.

The work of Mrs. J. A. Seabrook, the Speech Therapist, during the year, has proved a most valuable factor in the training of mental defectives suffering from speech defect. These patients have exhibited improved articulation, accompanied by an easier expression of personality, and better integration into group activities. Unfortunately, Mrs. Seabrook has had to resign her post at 31st December, 1953.

Training of Staff

As already mentioned, one member of the Occupation Centre staff was successful in obtaining the Diploma of the National Association for

Mental Health for Supervisors of Occupation Centres. Another Assistant Supervisor has been seconded for similar training.

A series of lectures was given during the year to personnel of the Mental Health Service and members of the Occupation Centre staff. Subjects dealt with included statutory duties and legal responsibilities for mental health ; the mental defective and mental deficiency ; the mongol child and his training ; the epileptic, his characteristics, care and treatment ; and other subjects appertaining to mental health work.

A Refresher Course for Mental Health Officers was held from the 23rd to the 27th March, 1953, under the auspices of the Department of Preventive Medicine of the University of Bristol. The Course was well attended by Mental Welfare Officers, Duly Authorised Officers, Psychiatric Social Workers, Health Visitors, nurses and by hospital and Mental Health Service administrative personnel.

Lectures and demonstrations on the Mental Health Service have been given to medical and social science students from the University of Bristol, and to nurses taking the Health Visitors' Course.

Co-ordination and Co-operation with Regional Hospital Boards and Hospital Management Committees

It is a pleasure to place on record the continued close co-operation which has existed throughout the year with the South Western Regional Hospital Board and the various Hospital Management Committees, who have again been most helpful in allocating beds to the department. The Medical Director is a member of two Hospital Management Committees, one dealing with mental defectives, and the other with mental diseases.

The Local Health Authority has ceased to supervise cases on licence from the Hortham-Brentry Hospital Group and the Stoke Park Group, both of whom now provide their own social workers. These officers maintain a close liaison with the Local Health Authority.

Voluntary Associations

Although the Local Health Authority has ceased to delegate to voluntary associations any of its statutory mental health duties, it is gratifying to report an unbroken continuity of valuable assistance provided by the various associations, such as the Bristol Council of Social Service, the National Association for the Blind, the Institute for the Deaf and Dumb, and similar bodies.

(2) Work Undertaken in the Community

Prevention and Care

The Mental Health Service does not attract so much general attention as some other branches of public health, yet it is entrusted with the very important statutory duties of prevention, care and after-care of mental instability in its many forms. Such trouble may be brought to a head in the individual in a variety of ways, involving the home environment, employment, and other social factors. The scope of preventive work for the maintenance of mental health is therefore far-reaching.

In order fully to implement Section 28 of the National Health Service Act of 1946, such work requires to range over a much wider field than it does at present, so as to help modify conditions which tend to bring the unstable individual to the point of mental imbalance. To be effective, it is essential that preventive measures should receive the close co-operation of all organisations in the community engaged in work for social welfare and environmental guidance.

During the year efforts have been made to bring to the notice of the general public the work of the service, and considerable local interest has been aroused in its various activities. This has been accomplished by means of talks to various groups and associations, and by addresses given to public meetings by the medical staff and well-informed mental health workers. It is felt that gradually a better understanding of the problems relating to mental health is being aroused in the minds of the community at large, and there is a changing attitude of public opinion. More and more cases are admitted to hospitals on a voluntary basis, without the need for certification.

After-Care

The after-care service provides assistance in the successful rehabilitation of persons discharged from H.M. Forces, mental defectives discharged from hospital or from guardianship, and patients from mental hospitals who have ceased to be dealt with by the hospital authorities

This service, in carrying out its legal obligations, also brings to the work the warmth of humanity and understanding. After-Care Officers making a sympathetic, personal approach, help such ex-patients with any problems they may have in respect of a place to live, suitable employment, pensions, and similar needs, as well as the continuation of treatment at psychiatric clinics. Everything is done to encourage and assist the employable individual to resume a useful place in society, and that type of individual whose rehabilitation does not reach the point of employability is helped to achieve a successful re-integration into community life.

Diversional and Social Therapy Centre

As an extension of the facilities provided by the Mental Health Service under Section 28 of the National Health Service Act, 1946, the Local Health Authority has established a Diversional and Social Therapy Centre open to various types of mental patients for rehabilitation purposes.

The centre is accommodated at Southmead Clinic, and provides for adult persons who, because of mental illness or mental instability, are incapable of taking up competitive employment, but are not in need of treatment in a mental hospital. Persons who have been discharged from mental hospitals but are not yet capable of resuming a full and normal place in community life are welcomed. The centre comprises an advisory clinic, handicrafts section, and social club. (See photograph facing this page).

Hostels for Mental Defectives

There is a great need for residential hostel accommodation for mental defectives who are at present detained in institutions and who have no homes to which they could be discharged, and no persons willing to be responsible for them. Such a hostel could be used as a home for such of these patients as were capable of holding remunerative employment, who, when their rehabilitation was complete, could then be re-integrated into the community. In order to further the work of after-care, the Local Health Authority has, during the year, approved in principle the setting up of a hostel of this type. Suitable premises are being sought for the purpose.

Diversional and Social Therapy Unit at Southmead

The after-care officers work in close co-operation with the Ministry of Labour and National Service, the Ministry of Pensions, the National Assistance Board, and other authorities who may be concerned in the individual case. No-one other than the officers concerned and the prospective employer need know of the ex-patient's past status. It is found that, in the main, employers are willing to give these people the opportunity they need to make a fresh start, and to help them achieve success in their work.

The desired result of sound after-care work is a reduction in the incidence of early relapse in mental cases, and the successful social rehabilitation of mental defectives.

Short-Term Care of Mental Defectives

The Local Health Authority has made good use during the year of the facilities afforded under the Ministry of Health Circular 5/52 for the short-term care of mental defectives without legal obligation, and 15 cases have been dealt with in this way. The department's action in each case has resulted from a situation having arisen in the family making it urgently necessary for the defective to be cared for temporarily elsewhere than at home—for example, by reason of illness in the family ; the mother being in urgent need of a holiday ; or the defective urgently requiring treatment which, because of his defect, could be given only in a mental deficiency hospital. Parents who for a variety of valid reasons found themselves in need of such relief, but who did not want their children admitted permanently to institution care, have welcomed and been most grateful for this service.

In all cases the required accommodation has been provided in local mental deficiency hospitals, and the period of stay has been usually for one month, or at the most within the allowed maximum of two months. Thanks are due to the South Western Regional Hospital Board and the local hospital authorities for their prompt and willing co-operation in these cases.

Lunacy, Mental Treatment, and Mental Deficiency Acts

The Local Health Authority has during 1953 diligently carried out its duties and obligations under the provisions of these acts, and the number of cases which it was called upon to deal with has been set out in the statistical section of this report.

Occupation and Industrial Centres

The Occupation and Industrial Centres situated at Marlborough House provide for the day training of mental defectives referred to the Local Health Authority by the Local Education Authority because they have been found to be suffering from a disability of mind of such a nature and to such a degree that :—

(a) they are incapable of receiving education at school ; or

(b) it is inexpedient that they be educated in association with others, either in their own interests or those of the other children; or

(c) they require supervision after leaving school.

Thus, the notification of all defective children between the ages of 2 and 16 years is the responsibility of the Local Education Authority, and the

Local Health Authority does not recognise them until they have been so reported.

In the Industrial Centre technical training is given in a wide variety of handicrafts. The male patients are occupied under the guidance of qualified tradesmen, and thereby gain knowledge in the handling of tools, and an insight into such occupations as woodwork, painting and decorating, boot and shoe repair, brushmaking and coir matmaking. The female patients are occupied in domestic work, general light handicrafts, sewing and knitting.

Mid-day meals are supplied to those attending the Industrial Centre ; 'bus fares are provided to and from Marlborough House, and a small sum of pocket money is given weekly to each defective occupied on work in the centre—not as a reward for work done, but as an incentive to industry and an encouragement to initiative.

The following statistical table shows the number of defectives attending the Industrial and Occupation Centres :—

Age Group.	*Male.*	*Female*	*Total.*
Under 16 years of age	57	46	103
16—20 years of age	30	20	50
21 years of age and over	25	30	55
	112	96	208

During the year under review the staff has been augmented to meet the needs of the larger numbers attending the centre, premises have been improved and redecorated, additional furniture and equipment have been delivered, and general adjustments made in order to cater for the larger numbers. It is felt, with some satisfaction, that the work of the centre as a whole has, during 1953, increased in efficiency and social value to the defectives who attend.

Short-term Proposals for Improvements at Marlborough House

The major part of the work involved in carrying out the proposed alteration and adaptation of the premises at Marlborough House has now been completed. The remaining items, namely, the extension of workshops for the Industrial Centre and the building of a temporary Occupation Centre annexe on the site of 10, Kingsdown Parade, are well advanced, and it is anticipated that the new accommodation will be in full use by mid-1954.

Health

The general health of the children throughout 1953 has been good and there have been no major outbreaks of illness.

In June, 29 children, and those members of the staff who wished to avail themselves of the opportunity, were x-rayed under the Mass Radiography scheme ; no cases of pulmonary tuberculosis were discovered.

The nursing sister has been in regular attendance for the treatment of minor ailments, inspection of heads, and general examinations of a superficial nature, any complaints of a more serious nature being referred to the defective's own doctor, or dealt with at the Central Health Clinic.

The Coronation of H.M. the Queen

The Coronation will long remain an unforgettable occasion for the Occupation Centre.

On 21st May, 1953, the children took part in a Coronation Pageant, entitled " Elizabeth to Elizabeth," portraying outstanding historic personages and scenes—with music and dances of the times—through the centuries, from the time of Queen Elizabeth the First to the Coronation of Queen Elizabeth the Second. This was followed by a special lunch, after which each child was presented with a blue glass beaker, filled with sweets, as a Coronation souvenir. The pageant itself was so successful that three performances were requested.

Holiday Camp

This was held at the Bristol Youth Organisation's Camp, Brean Down, near Weston-super-Mare, between 20th June and 18th July, 1953. Fifty children and 27 adults spent a fortnight each at the camp. These numbers were made up of 19 boys and 31 girls under the age of 16 years, and 20 males and 7 females over the age of 16. Six members of the staff were in attendance. The conduct of the campers earned high praise from the Warden. The adult males were unfortunate in the weather conditions, only the first two days being without rain. Nevertheless, they thoroughly enjoyed themselves. All campers were provided with beds, and slept four in a tent.

The fundamental value of the camp lies in the mental and physical stimulus which it affords to those taking part, who would be unable for various reasons to have a holiday with relatives or friends.

A special word of thanks is due to the staff, who unsparingly give their time to make these camps the highspot of the year for the campers.

Marlborough House Scout Troup

The 72nd Bristol (Marlborough House) Troup of Scouts has now become an essential part of the training at the centre. The enthusiasm of all concerned has enabled early difficulties to be overcome. The inclusion of a Wolf Cub Pack has now given the movement Group status.

In July 1953 Scouts and Cubs attended the annual camp at Brean Down, which was as far as possible organised to conform with scouting standards.

There are now 25 Scouts and 12 Cubs in the Group. Fourteen of the Scouts have passed a modified Tenderfoot Test, and it is hoped that six will have passed their Second-Class Test by the early Spring. Meetings are held twice weekly at Marlborough House, and enthusiasm is marked. The major difficulty—that of providing suitable accommodation — was overcome by the Scouts themselves, all the work involved in the conversion of a disused cellar at Marlborough House into a clubroom having been undertaken and completed by the Group itself, including its suitable decoration and furnishing.

This clubroom was opened officially on the 1st September, 1953, by Mr. J. L. Milligan, County Scout Commissioner for Bristol, on whose suggestion the Headquarters has been named the " Coronation Room." The Commissioner's remarks, which included the phrase " You have added something to this wonderful Coronation year, and have set an example to others in Bristol," were reported in the local press. The

Scouts' Room has also received the praise of other leaders of the local Scouting Association. (See photographs facing page 43).

Parents take a keen interest in the Group's activities, and an Open Day for parents was held in October, 1953.

A mentally handicapped Scout requires much patient training, but once he has grasped the fundamental principles of Scout Law, there is a noticeable improvement in his conduct, and a sense of loyalty is developed, as membership of his own Scout Group affords some compensation for his unavoidable exclusion from various other social and group activities.

The 68th Bristol (Marlborough House) Guides and Rangers

For the Guides and Rangers it has been a comparatively uneventful year, during which the Company's activities have been somewhat limited owing to the temporary absence of the Guide Captain, Mrs. G. Milsom.

The Company now consists of 13 enrolled Guides and 13 enrolled Rangers, all of whom suffer from varying degrees of mental handicap, as well as from various physical disabilities. During the year weekly meetings have taken place whenever possible, all within school hours, the Guide work being included in the Occupation Centre curriculum.

The main event of the year has been the inclusion of our Company in the Extension Group of the Girl Guides' Association. It is believed that the Marlborough House Guide Company is the first Occupation Centre Company to be so recognised by this Association. All members of the Company have now been issued with regulation Guide and Ranger uniform.

Marlborough House Parent-Teacher Association

The Association has again maintained throughout the year its very close contact with the work of the department, and the number of parents giving active support has increased. A very happy and close liaison exists between the Association and the Occupation Centre staff, and this is of great value to all concerned. By reason of its voluntary status, the Association is able to provide gifts and so on, for the children, which could not be supplied from official funds. " Extras " were provided for the Coronation tea, and sweets to fill the Coronation beakers. When the Coronation pageant was presented by the children, the parents willingly supplied clothing and materials for costumes, and several members attended frequently over a period to help make them.

The Association members donated all the fruit and other items for the Harvest Festival, the proceeds later being divided among various almshouses in the district. The members also provided toys for the Christmas tree, so that each child under the age of 16 was able to receive a gift.

The Association has set itself the goal of obtaining a film projector to be handed over for the use of the Occupation Centre. Thanks to a dancing display presented by the pupils of Miss Sheila Love, proceeds amounting in all to some £96 were handed to the Association and this has enabled the purchase of film apparatus to be undertaken.

In its programme, the Association includes as many lectures as possible, and during the past year visiting speakers have included the Chief Probation Officer and the Chairman of the Magistrates for Bristol Juvenile Court.

Marlborough House 72nd Bristol Troop Cubs and Scouts meet at their Headquarters

As the work becomes more widely known, there is a gradual increase in the number of persons who are prepared to give practical support by way of donations etc.—even though they may have no direct link with a child attending the Occupation Centre.

Conclusion

The overcrowding which exists in mental hospitals and mental deficiency hospitals has increased the volume of work the Mental Services staff has been called upon to do ; and the interest and understanding shown by individual officers has gone far to mitigate hardship in many cases. A noticeable sense of vocation exists, without which it would be impossible to maintain the high standard of efficiency which exists in the department, and a deep debt of gratitude must be acknowledged to the members of the staff.

MENTAL HEALTH SERVICE

Statistical Tables

(i) Incidence by Wards—Mental Deficiency and Mental Illness

Ward	*Total population	Mental Deficiency		Mental Illness†	
		Total known cases at 31.12.53	Rate per 1,000 of population	1953 cases only	Rate per 1,000 of population
1. Avon	24,436	76	3·11	35	1·43
2. Bedminster ...	17,049	163	9·56	69	4·05
3. Bishopston ...	12,126	19	1·57	23	1·90
4. Brislington ...	18,908	40	2·12	38	2·01
5. Clifton	11,631	64	5·50	54	4·64
6. District	15,593	51	3·27	23	1·47
7. Durdham ...	14,769	9	0·61	6	0·41
8. Easton	16,097	70	4·35	49	3·04
9. Eastville	14,182	61	4·30	21	1·48
10. Hengrove ...	33,186	71	2·14	22	0·66
11. Hillfields	17,457	71	4·07	18	1·03
12. Horfield	25,268	107	4·23	49	1·94
13. Knowle	18,050	196	10·86	55	2·99
14. Redcliffe	2,759	21	7·61	5	1·81
15. Redland	12,430	44	3·54	40	3·22
16. St. Augustine ...	7,970	9	1·13	3	0·38
17. St. George E. ...	18,173	80	4·40	19	1·05
18. St. George W. ...	15,482	48	3·10	6	0·39
19. St. James ...	4,330	21	4·85	11	2·54
20. St. Michael ...	10,934	40	3·66	15	1·37
21. St. Paul's ...	9,331	81	8.68	26	2·79
22. St. Philip N. ...	13,206	48	3·63	12	0·91
23. St. Philip S. ...	11,488	70	6·09	1	0·09
24. Somerset	22,535	30	1·33	7	0·31
25. Southville ...	13,675	32	2·34	19	1·39
26. Stapleton ...	18,215	122	6·70	66	3·62
27. Westbury-on-Trym	30,174	128	4·24	61	2·02
28. Windmill Hill ...	13,187	39	2·96	5	0·38
Totals ...	442,641	1,811	4·09	758	1·71

* 1950 figures—latest available for Wards.

† *i.e.* Cases dealt with under Lunacy and Mental Treatment Acts.

(ii) Total number of Mental Defectives known to Local Health Authority on 31.12.53

	Male.	*Female.*	*Total.*
In Institutions and on Licence	338	327	665
Under Guardianship	30	21	51
Under Supervision	497	435	932
Pending	36	22	58*
Discharged from order to friendly oversight	47	58	105
Totals ...	948	863	1,811
Rate per 1,000 (1953 population) ...	2.14	1.94	4.08

Not Included—No. of children ascertained by Local Education Authority as educationally sub-normal ... 562.

* *Of these, three were awaiting admission to institutions.*

(iii) Total Mental Deficiency cases dealt with during 1953 :—

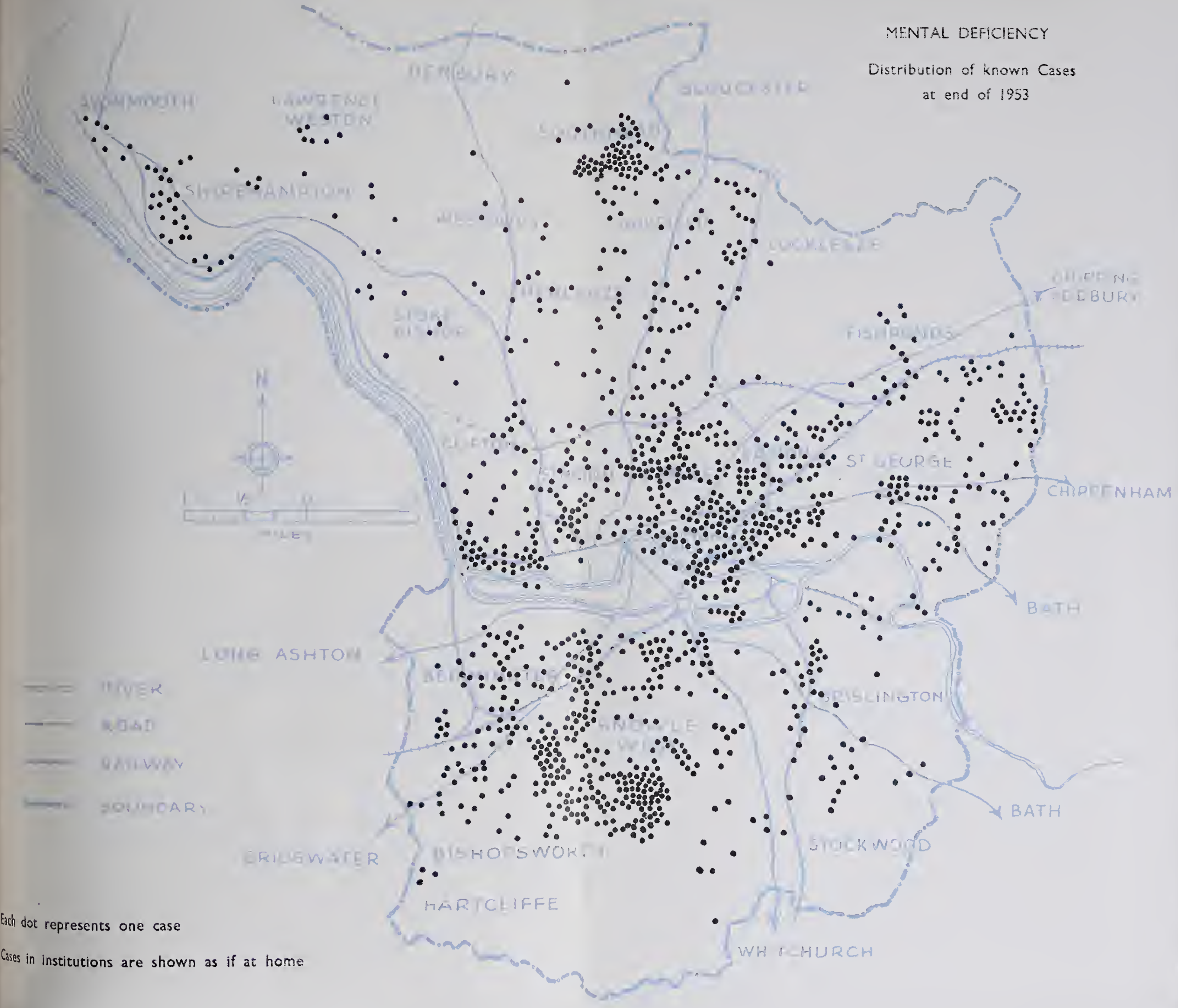
Referred by :—	
Local Education Authority	70
General Practitioners	4
Police Courts	4
Others	59
Total ...	137
Disposal :—	
To Institutions	17
To Guardianship	—
To Supervision	49
To Supervision by other Local Health Authorities	3
Died	3
Readmitted to Special Schools	1
Action not yet taken (school leavers)	13
Action not yet taken (other than school leavers)	45
Found not to be mentally defective	6
Total ...	137

(iv) Total number of Mental Defectives discharged from care during 1953 :—

	Male.	*Female.*	*Total.*
From Institutions :—			
By Authority of Board of Control ...	17	8	25
By operation of Law	1	4	5
From Guardianship :—			
By Authority of Board of Control ...	–	–	–
By operation of Law	1	–	1
From Supervision by Local Health Authority	4	3	7
Totals ...	23	15	38

MENTAL DEFICIENCY

Distribution of known Cases at end of 1953



Each dot represents one case

Cases in institutions are shown as if at home

(v) Total number of Mental Defectives who died during 1953:—

	Male.	*Female.*	*Total.*
Whilst in Institutions	1	5	6
Whilst under Guardianship	1	–	1
Whilst under Supervision	2	1	3
Totals ...	4	6	10

(vi) Mental Illness :—

Patients removed during 1953 :—

	Male.	*Female.*	*Total.*
Certified admissions (*Bristol Hospitals*) ...	52	95	147
Certified but removed to outside Bristol area	14	26	40
Voluntary admissions	54	117	171
Temporary admissions	6	18	24
*Removed under Sect. 20, Lunacy Act, 1890, but not Certified	30	26	56
*Detained under Sects. 21 and 21A, Lunacy Act, 1890	75	113	188
Removed from Private to Public Hospitals	–	1	1
Private admissions	–	–	–
Urgency Orders	1	1	2
Dealt with other than under Lunacy and Mental Treatment Acts	93	126	219
Totals ...	325	523	848

* No further action required under L. and M. T. Acts.

(vii) Mental Illness :—

Total Number of Bristol Patients in Mental Hospitals on 31.12.53 :—

	Male.	*Female.*	*Total.*
Certified	559	843	1,402
Voluntary	242	382	624
Temporary	9	32	41
Totals ...	810	1,257	2,067
In Dundry Villas Neurosis Unit ...	20	18	38

(viii) Number of Persons Receiving Psychiatric After-Care from Local Health Authority on 31.12.53 :—

	Male.	*Female.*	*Total.*
Ex-Service patients	33	1	34
Others	4	4	8
Totals ...	37	5	42

6. PREVENTION OF ILLNESS, CARE AND AFTER CARE

(I) THE PREVENTION OF BLINDNESS

Welfare Officer's Report for 1953

The Prevention of Blindness Officer (Miss Wallis, health visitor) continues to work closely with the almoner of the Eye Hospital and with the home teachers for the blind, from whom she receives her cases, apart from those referred direct by Mr. Garden at the registration clinics.

The work is growing considerably as is shown by the table below.

	1952	**1953**
Cases on W.O.'s register	326	**360**
No. of first visits made	83	**96**
No. of "repeat" visits	180	**197**
No. of transport cases needing W.O.'s personal supervision	183	**192**

One of the most important diseases from a follow-up and preventive point of view, is Glaucoma. The welfare officer has been visiting the most urgent of these, but the need for a comprehensive separate register, has long been felt, and preparations are being made for this to be compiled.

The Prevention of Blindness Officer interviews all patients attending the registration clinics, and those who are in need of treatment are followed up and encouraged. Help is given to take the necessary steps to obtain treatment, either medical or surgical.

In quite a number of cases the patients refuse operation at first, but with patient encouragement they can be persuaded. One such lady of eighty-four years, who was in very good general health, found life very irksome, without her sight, but was extremely nervous of attending hospital or having an operation. However, after much preliminary work, she had her cataract removed, and although she subsequently had to return to hospital three times for further surgical treatment, she is now very pleased and thankful to have enough sight to get about unaided and to see her beloved oil paintings which she herself painted in her earlier days.

The number of new blind registrations for the year is 94 and the number of new partially-sighted registrations is 27.

It will be seen from the following table that the follow-up of these cases is very good. Out of 12 cases of cataract referred for treatment, 10 actually had treatment, and in the case of 5 of them the result has been a considerable improvement in their sight. The other cases are mostly complicated by the presence of glaucoma, or diabetic retinopathy in addition to the cataract.

All cases of glaucoma referred for treatment have attended.

There were no cases of ophthalmia neonatorum up for registration.

(a) Registration of Blindness

	Cause of Disability							
	Cataract		Glaucoma		Retrolental Fibroplasio		Others	
	Blind	P.S.	Blind	P.S.	Blind	P.S.	Blind	P.S.
1.—No. of cases registered during the year in respect of which paragraph 7c of Forms B.D.8 recommends :—								
(*a*) *No treatment*	20	5	3	–	2	–	31	5
(*b*) *Treatment* (*medical, surgical or optical*)	12	8	11	2	–	1	15	6
2.—No. of cases of 1 (*b*) above which on follow-up action, have received treatment ...	10	5	11	2	–	1	11	6
3.—No. of cases 1 (*b*) refusing treatment and reason given for doing so	2*	3†					4‡	

* (i) Too old for operation.
(ii) Could not be bothered messing about.

† (i) ? Having treatment privately.
(ii) Too old.
(iii) Will come later, wife ill.

‡ (3) Too nervous to attend hospital
(1) Reason not known.

(b) Ophthalmia Neonatorum—No registrations.

(II) TUBERCULOSIS—CARE AND AFTER CARE

by C. L. Bryant (*Executive Officer, Tuberculosis Service*)

Services available for the Tuberculous and a Summary of the Work carried out during 1953

Government Financial Assistance

Maintenance allowances are payable to certain persons " *who have suffered a loss of income to undergo treatment for respiratory tuberculosis.*"

The allowances are payable by the National Assistance Board upon application by the patient, and medical certification by the Consultant Chest Physician.

Patients are issued with application forms by the welfare officer to forward to the National Assistance Board, whose officers visit the homes of patients and arrange for payment of the allowance.

During 1953, application forms were issued to 345 patients.

Extra Nourishment

This takes the form of 2 pints of milk per day granted upon medical recommendation and subject to an income limit. Cases of hardship are submitted to an assessment committee for special consideration. The daily average number of patients receiving free milk during 1953, was 474.

Home Nursing Service

Home Nursing is provided by the Bristol District Nursing Association on behalf of the Local Health Authority, and details of cases and visits are shown elsewhere in this report. No charge is made to the patient for this service.

Domestic Help Service

Home Helps for tuberculous persons are provided through the Local Authority's Domestic Help Service upon the request of the chest physician, tuberculosis nursing sister or welfare officer.

Payment is required for this service according to the means of the patient. A summary of the year's work is given elsewhere in the report.

Boarding out of Children from Tuberculous families

Arrangements are made with the Children's Department for the boarding-out, or accommodating in Children's Homes, of children from tuberculous families—particularly in those cases where the mother is tuberculous and there is no relative to undertake the care of the children.

Parents are required to contribute towards the cost of maintenance according to means.

During 1953, 11 children were taken into care by the Children's Officer.

Housing

By arrangement with the Housing Committee, tuberculous persons who have applied for re-housing are supported by the Medical Officer of Health, a special investigation being made at the home of the applicant and a recommendation for additional points forwarded to the Housing Department after careful consideration of the home circumstances and the medical aspects of the case.

During 1953, 222 such cases were supported, and 118 cases were rehoused.

Rehabilitation

(I) Sheltered Employment, Light or Part-time Work

Patients who are considered fit for sheltered employment, light or part-time work, are referred to the Ministry of Labour for registration under the Disabled Persons (Employment) Act, with a view to being placed in work suited to their physical capacity, or undergoing a course of training, or a short course at an Industrial Rehabilitation Unit.

No. Referred to Ministry of Labour	No. placed in full Employment	No. placed in part-time Employment	No. sent for Training	No. sent to Industrial Rehab. Unit.
Males 109	43	3	10	19
Females 60	30	3	1	8
Total 169	73	6	11	27

(2) Industrial Rehabilitation Unit

The object of the short course at this Unit at Fishponds is to restore as quickly as possible the employment capacity of those who have been disabled by sickness or accident, and to give them an opportunity to re-adjust themselves to working conditions. The course usually lasts six weeks.

No. Accepted by Unit		No. placed in Employment, or sent for Training	No. Awaiting Training	No. still at Unit
Males ...	19	10	7	2
Females ...	8	5	3	–
Totals ...	27	15	10	2

(3) Special Remploy Factory

A special Remploy Factory operates at Southmead providing sheltered employment for an average of 55 tuberculous persons (48 males and 7 females) who are engaged in cabinet making.

The patients employed are registered disabled persons who have been recommended by the chest physician as suitable for this work, and are under medical supervision whilst so employed.

(4) Papworth Village Settlement, Cambridge

During the year two male patients have been accepted by the Papworth authorities for entry into the settlement with a view to colonisation.

The cost of maintenance is borne by the Local Health Authority, but at a reducing rate as the patient's capacity for work increases.

Interviews and Visits by Welfare Officers

The Welfare Officers during the year interviewed approximately 3,500 persons in connection with allowances, extra nourishment, pensions, housing, occupational therapy, training, employment, and many problems of a domestic or financial nature.

With their specialised knowledge of national and local services, and of voluntary organisations concerned with tuberculosis, the welfare officers can secure for the patient the maximum assistance available, and by re-assuring and helping to relieve him of financial anxiety can enable him to benefit fully from treatment.

Regular visits are paid to hospitals where tuberculous patients are under treatment.

Details of the help afforded to patients during 1953, is shown below.

Work of the Bristol Tuberculosis Voluntary Care Committee

This committee, consisting or representatives of the Local Authority and various voluntary organisations in the city, works in close co-operation with the Medical Officer of Health, the Chest Physicians, nursing and Welfare Staff in rendering practical assistance to patients and their dependants.

Grants made during 1953.

Grants of clothing	269
,, ,, footwear	115
,, ,, bedding	104
,, ,, furniture	7
Loan of nursing equipment etc.	40
Cash Grants.	
Travelling expenses	16
Coal bill	11
Gas bill	3
Electric bill	6
Rent arrears	5
Radio licence	3
Holidays	4
School Fees	1
Sundry	31
	615

Occupational Therapy

Classes of Occupational Therapy have continued in charge of a full time occupational therapist with a part time assistant. Three sessions are held each week with an average attendance of 12. Patients unfit to attend the classes are visited at home, provided with materials and given instruction. 450 visits were made in 1953.

The handicrafts taught include all kinds of leather work, embroidery, lamp shade making, rug making, and light carpentry.

Kiosks

The kiosks established at Ham Green, Southmead, Frenchay, Snowdon Road and Winsley Hospitals, for the sale of tobacco, cigarettes, confectionery, stationery and sundry other goods to patients, staff and visitors, provided suitable employment for 10 ex-patients. The profit accruing from this undertaking are available for the other activities of the committee.

Social Activities

A social club for patients and friends was started in 1952 in conjunction with the occupational therapy classes and has a membership of 40. The club meets one evening a week at the occupational therapy room at Penn Street.

A monthly magazine of interest to patients is produced by the club members and circulated to patients in hospitals.

Christmas parties for children of patients are given each year at the Central Health Clinic.

General

The welfare officers and staff work closely with the medical and nursing staff of the chest clinics, the officers of the National Assistance Board, Ministries of Labour and Pensions, the hospital almoners, Bristol Council of Social Service, British Red Cross Society and so on, whose ready co-operation in the interest of patients is gratefully acknowledged.

(III) VENEREAL DISEASES

Contact Tracing, Default Control and Rehabilitation

by Miss G. Stinchcombe and Mr. V. I. Deller (*Welfare Officers*)

The principal activities of the social workers in the venereal diseases section can again be incorporated under the main headings of Contact Tracing, Default Control and Rehabilitation.

The increasing confidence of the patients is demonstrated in their frequent requests for the social worker to approach their suspected sources of infection and familial contacts and invite them to the clinics for medical investigation.

Although the incidence of venereal disease in a communicable form is steadily decreasing, the output of effort on the part of the social worker continues to demand a high degree of tact, diplomacy and efficiency in maintaining the standard necessary in safeguarding the interests of public health.

Default control has been closely watched and the rehabilitation of both male and female patients carried out with a marked degree of success.

The following figures indicate the statistical result of the year's work :—

	Male.	*Female.*
Total number of Registrations during 1953	**1,386**	**450**
New cases persuaded by the social workers to attend clinic for medical examinations in view of possible risk of infection	87	85
New cases who attended through other agencies ...	1,299	365
Number of cases on social workers' register from 1st January to 31st December 1953	491	361
Social Workers attendances at clinic	382	419
Number of new cases interviewed in the clinic ...	500	305
Current cases interviews	583	926
In-patient interviews	327	267
Contact tracing visits	144	157
Visits to Defaulters	406	414
Consultations with voluntary bodies	266	427
Total number of visits including those for other purposes	**871**	**961**

Default Control

	Male.		*Female.*	
Number of patients first registered in 1953 defaulting	51		42	
Number of other patients defaulting ...	110		131	
	161		173	
Number of actual defaults involved ...		264		245
Number of patients who returned for treatment	135		149	
Number of patients who did not return ...	26		24	

Disposal of Balance

	Male	Female
Transferred to other clinics outside Bristol Area	17	5
Stated to be attending own Doctor	–	4
Refused to attend	1	6
No Trace : (a) False name and address ...	2	–
(b) Gone to unknown address ...	3	2
Carried forward to 1954	3	7
	26	24

Female Contact Tracing, 1953

Total number of Contact Cards received			82
Traced and examined	19 representing	26 cards	
Traced, but refused examination	3 ,,	4 ,,	
Untraceable		24 ,,	
No action—insufficient information		7 ,,	
False information		1 ,,	
Forwarded to other authorities		20 ,,	
		82 ,,	

Notes

Of the 20 notifications forwarded to other authorities 12 replies were received. Of these, seven contacts were examined, three refused examination, and two were untraceable.

Of the 22 local contacts traced and examined, representing 30 cards, one contact was named twice, one four times and one five times.

Information on the traced cards read as follows :—

Name and address ...	5
Christian name only ...	12
Address only, no name ...	2
Description only ...	4
Name only, no address...	3
	26

Result of Diagnosis.

Out of 18 male "G" cases, 13 female diagnoses agreed ; two fell into the " epidemiological " group of Gonorrhoetics in that they were the alleged sources of male infection ; 3 were non-venereal

In the 1 male syphilis case, the female was diagnosed as non-venereal.

Information on the Untraceable Cards was as follows :—

Name only, no address...	2	Description poor : no details of haunts, occupation, or other possible " locating " information.
Christian, or nick-name with description ...	9	
Description only ...	13	
	24	

Male Contact Tracing, 1953

Total number of Contact Cards received		23
No action	4	
Forwarded to other authorities ...	9	
Traced and examined	7	
Traced, but refused examination ...	1	
Untraceable	2	
	23	

Notes

Of the 9 notifications forwarded to other authorities 5 replies were received. Of these, three contacts were examined and two were untraceable.

Information on the traced cards read as follows :—

Name and address ...	3	*Result of Diagnosis.* Out of 5 female "G" cases, 3 male diagnoses agreed and 3 were non-venereal. In the 2 female syphilis cases, 1 male was diagnosed as syphilis and the other non-venereal.
Name and district ...	2	
Name only	1	
Description only ...	1	
	7	

Information on the Untraceable Cards was as follows :—

Left the address given, whereabouts unknow	1
Name only	1
	2

(IV) OLD PEOPLE'S HEALTH AND WELFARE

Mrs. E. M. Sheen ; Mrs. M. Aplin ; Miss M. Harris
(*Health Visitors for Sick and Aged*)

Old people's welfare appears to have now become well established amongst the health department's other activities. New cases are notified every month to the extent of well over a hundred cases.

It is a service that gives advice on problems connected with illness, welfare, and family difficulties, and all age groups are visited. Actual concrete assistance is given in most cases, by making contact with all the services and agencies that can give assistance. Many visits are paid to the young chronic sick, as well as the aged.

Adverse social conditions exist in some cases, but often the home surroundings are comfortable and adequate but, because there is no one at home during the day, difficulties arise. This is where one of the health visitors for the sick and aged step in and give advice. For example ; a widowed mother is ill, her single daughter being the breadwinner has to go to work. Home help assistance does not completely fill the need. The health visitor knows someone who wishes to supplement her income. The married members of the patient's family can pay a little towards the help. The whole amount is sufficient to pay for someone to go in and give the patient her dinner and stay with her for a few hours. The district nurse very kindly agrees to go in daily to give nursing care. Nursing equipment is loaned and the launderette service of the Council of Social Service is used. Thus, very simply, someone is assisted in a practical way to go back to work.

Many books would be needed to give information of the way in which patients and families are assisted. The corporation's own services are drawn upon to the fullest extent. Here, attention should be drawn to the excellent nursing equipment of the corporation. Commodes, tripod walking sticks (to assist mobility in stroke, disseminated sclerosis cases and others), portable bed pulleys have all been loaned, and many other articles too numerous to mention.

This is an appropriate place to mention the loan service of draw sheets and bed gowns. Incontinent patients are helped, at least their relatives or attendants are, to enable them to keep the patient clean. The service is immediately made available to those in need.

In very many cases, hospital care is the only solution. General practitioners and the health visitors are in close touch over cases like these. Home reports are sent to admission departments enabling the hospital authorities to have an up-to-date picture of the home surroundings and difficulties.

Old people and the young chronic sick are visited after discharge from hospital (where there might be difficulties) on the request of the almoner. Many cancer cases are followed up.

Reports are also given on some of the cases on the large chronic sick waiting list, when time permits.

Very many requests come along regarding assistance in procuring more suitable accommodation—sometimes because the old person has had to leave his or her house, flat or room. In many cases material help has been given in assisting them to procure more suitable accommodation.

Stress should be placed on the need for night sitters up and clinic chiropody treatment centres.

Many old people, their relatives or friends come along to the clinic to discuss informally family problems etc.

One can visualise for the future an all purpose service, incorporating clinics for chiropody treatment, convalescent homes for the elderly and a fully developed corporation laundry service.

The health visitors for the sick and aged keep in close touch with other corporation officers, thus avoiding overlapping of services. This is sensible and very worthwhile to the officers concerned. Co-operation is the key note of " Old People's Welfare."

During 1953 the number of new cases registered	1,037
Total number of cases on the register at end of Dec. 1953 ...	2,268
The number of visits paid during the year 1953	4,068
Assistance given in various ways in 1953	2,591

7. HEALTH AND TUTORIAL EDUCATION

(I) HEALTH EDUCATION

by D. M. Evans, B.A. (*Personal Assistant to Medical Officer of Health*)

Continuity is the essential factor in all health education activities. If an approach is to be made to the often expressed but seldom realised aims of health education, then a persistent and consistent policy of health teaching must be maintained. This approach to the problem is expressed in the old Welsh maxim " Dyfal donc a dyrr y garreg "—Constant dripping will break the stone.

(I) Tutorial Problem

Health Educators. Bristol is a heterogeneous community with correspondingly complex health and social problems, but the main lines of activity remain fairly constant, although the method of teaching health principles varies with the nature of the problem. There is the continuing tutorial problem of providing the "natural" health educators, who have specialised knowledge and educational responsibilities or opportunities, with opportunities to keep abreast with new developments and to provide them with teaching media (visual aids etc.) which will enable them to fulfil their task more effectively.

This task is facilitated by the close liaison with the Preventive Medicine Department, made possible by the dualism of function of the Medical Officer of Health and the Professor of Preventive Medicine, in the person of Professor Parry, which makes it possible to meet the needs of field workers with academic opportunities for extending and refreshing their knowledge.

Courses. In this way courses were organised in 1953 for sanitary inspectors, mental health officers and health visitors, and the Health Committee wisely afforded opportunities for officers to attend.

Visual Aids

Films. During 1953 the department was able to make good some of the leeway left by the disbandment of the Central Office of Information's film units and library in Bristol. This was done as the result of the purchase of a film projector (Bell and Howell 620) and as a result some 150 film shows, accompanied by speakers, were arranged during the year. These were mostly to infant welfare clinics, food handlers, parent-teachers associations, student groups, and interested societies or guilds. The projectionists were provided by training a panel of eight of the administrative staff to enable them to become part-time projectionists : transportation is arranged through the transport department. Films are provided in three ways :—(a) *By outright purchase.* A small library has been built up of a dozen films on subjects ranging from child care to food hygiene and rat extermination ; (b) *By borrowing films from the Central Film Library.* For special purposes ; and (c) *By borrowing films from other bodies,* such as the American Embassy, Canadian Film Board and Carlson House School for Spastics.

It cannot be said that this arrangement for the projection of films is ideal because of difficulties in maintaining uniform care of the equipment by all concerned with projection and transportation, but on the whole it has worked reasonably well, although with constant use and movement wear and tear may become a problem.

Film Strips. A great extension was made in the use of film strips for teaching purposes, and plans are in being to purchase additional projectors during 1954 to enable each major clinic to hold a film strip projector for use in health education work, both at the clinic and for outside talks. A library of 70 film strips is now held by the Personal Assistant to the M.O.H. for use by persons giving talks. Home accidents, first aid, physiology, atmospheric pollution, clean food, and film strips illustrating the work of a public health department, are among the subjects catered for in the library.

Flannelgraphs. It is hoped in the near future to provide flannelgraph boards for teaching purposes at about a dozen centres and to encourage health visitors to construct their own flannelgraph visual aids to illustrate short talks.

(2) Educating the General Public

The limiting factors when considering educating the general public on health matters appear to be :—

- (i) *Natural Health Educators* (those with special health knowledge) are in short supply and are in demand for competing priorities. In Bristol the policy is to spread the burden of health education throughout the technical staff of the department, their activities being co-ordinated by the Personal Assistant to the M.O.H. There is no health education section as such.
- (ii) *The General Public* is composed of many groups of different ages and stages of development, who have widely divergent degrees of experience, interest and intelligence, and for whose attention there is much competition.
- (iii) *Topics.* There is a super-abundance of health education topics and to a certain extent there must be selectivity as between groups to be educated and as between subjects to be stressed.
- (iii) *Economics.* There are also the economic factors of scarcity of health education equipment (visual aids, etc.) and trained personnel. There are, of course, a great deal of " invisible imports," as a result of health education work, which cannot be directly measured but can have important effects on the cost of the health and social services.

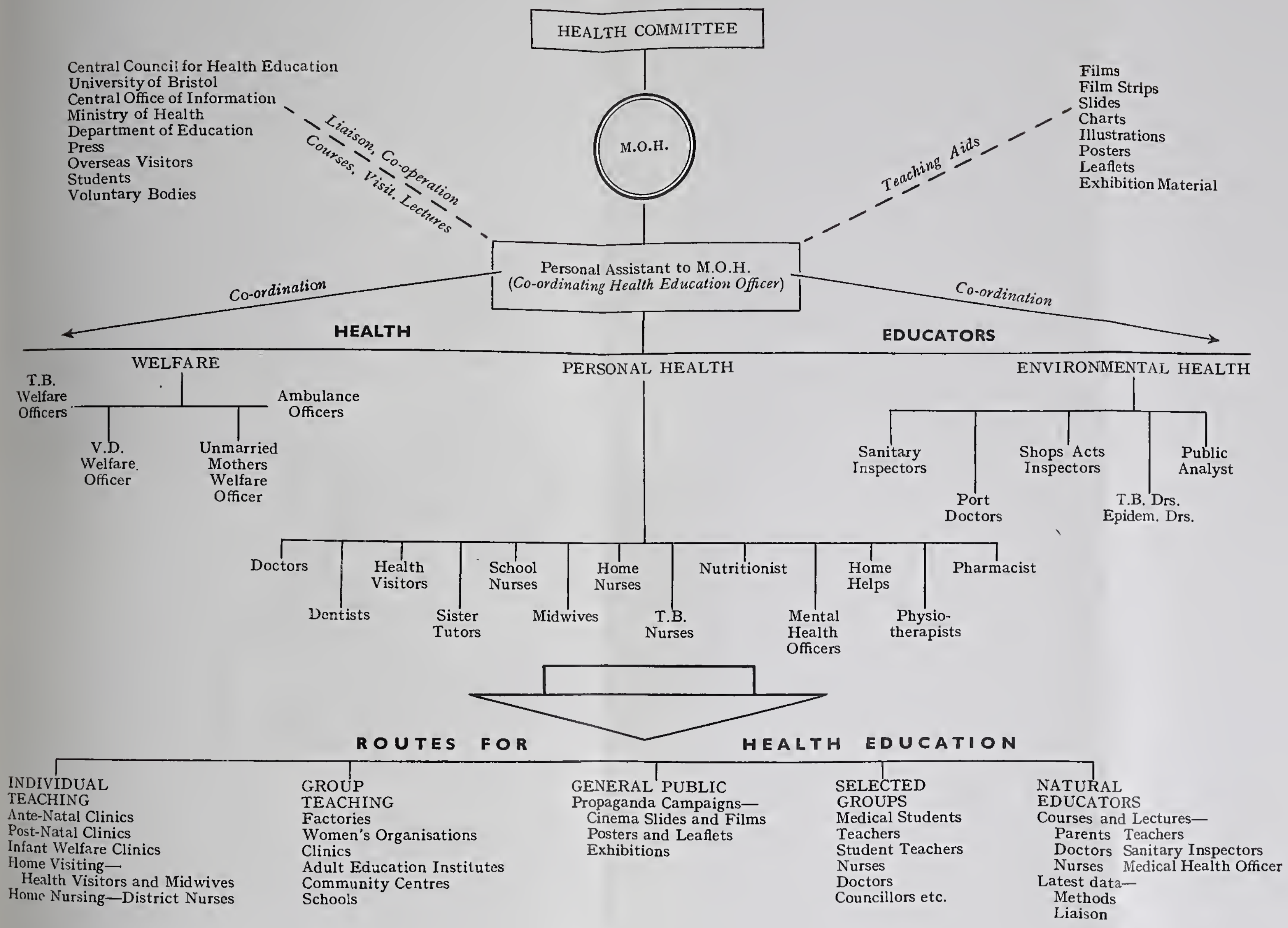
A short resumé of Health Education during 1953

(1) *Ante-natal Clinics.*

During 1953 two experimental schemes were arranged at Knowle and Lawrence Weston Clinics whereby a group of five talks were given to mothers-to-be in preparation for childbirth and parenthood and to emphasise all aspects of pre-natal care. A further two talks were given to include the " fathers-to-be " at evening sessions.

HEALTH EDUCATION IN A PUBLIC HEALTH DEPARTMENT

(BRISTOL C.B.)



The talks were given by midwives, health visitors and the nutritionist, and visual aids (films, film strips and the birth atlas) were used. (The film strips used were :—

(i) Nine to get ready (Film Board of Canada).
(ii) Ante-natal Exercises (Camera Talks Ltd.)
(iii) Preparation for the Newcomer (Camera Talks Ltd.)
(iv) The Nursing Couple (Film Board of Canada).
(v) Baby's Daily Routine (Camera Talks Ltd.)

It was generally agreed that the ante-natal teaching given in this way (which linked up with the work of the physiotherapist in the relaxation classes) was most effective. It is proposed to extend these classes to other ante-natal clinics in 1954 and the group teaching will certainly augment and strengthen all individual teaching done at the centres and in the homes.

(2) *Infant Welfare Centres.*

Programmes of talks by outside speakers are arranged by the Sister Tutor ; a programme of films introduced by health visitors is organised by the Personal Assistant to the M.O.H. ; and a programme is organised by each clinic sister, increasingly making use of film strips and other visual material. In this way many hundreds of talks are given annually to mothers attending the city's clinics on such topics as :—Care of the infant's feet ; the continuing need for vaccination and immunisation ; the prevention of home accidents ; care of the eyes ; clean food ; nutrition and infant feeding.

(3) *Schools.*

During 1953 a health exhibition, talks, film shows and other activities were organised at Greenway Secondary Modern School (June 1953) and much useful health education work was done. This is reported on more fully in the School Health Report (Section F).

From time to time talks are given by doctors and nurses in the school health service to parent-teacher's associations in different parts of the city, and films and film strips are used to stress various aspects of child care (importance of sleep, play, care of the eyes etc.)

(4) *Sanitary Inspectors' Educational Activities.*

The Chief Sanitary Inspector and his staff are most active with regard to the promotion of proper habits with regard to food handling. A large number of lectures and talks are given every year to such groups as students, food handlers of all kinds ; evening institutes ; and many outside bodies. Again films and film strips have been obtained to facilitate this important work and there has been a great extension in their use during the year.

(5) *Special Topics.*

Cancer. The programme for cancer education outlined in "Cancer in Bristol," published last year, has been implemented during 1953. During 1952 the co-operation of the hospital groups in the Bristol area and of the Board of Governors of the teaching hospitals, was obtained. The S.W. Regional Hospital Board promised full priority for the admission of cancer cases to hospital. During 1953 further important steps were taken, with the full approval and support of the Bristol Local Medical

Committee, in order to gain the approval of medical practitioners in general and family doctors in particular. This meeting was held at the Royal Fort Physics Lecture Theatre and Mr. Reginald Vick, O.B.E., M.Chir., F.R.C.S., was the main speaker, supported by a distinguished panel including Professor Rendle Short, Professor Milnes Walker and Mr. Tudway. The chair was taken by Dr. Anderson (Chairman of the Bristol Local Medical Committee). Full support for the scheme was promised by medical practitioners present.

The next step was taken in holding a similar lecture-conference at the University in October, 1953, but this time directed at midwives, health visitors, district nurses, hospital nurses and almoners. This time a lady doctor, who had been treated for cancer of the breast some seven or eight years ago, took the chair. Mr. Vick was again the main speaker but Mr. R. Cooke, F.R.C.S., took the place of Professor Rendle Short on the panel.

The response of the nurses was markedly different from the conservatism of the doctors in that they felt that the scheme should not only be implemented but extended. It was argued that it was all very well to press for earlier diagnosis and obviating the time lag between first symptoms and treatment but unless the laity were made aware of danger signs and symptoms, even within the limits of the scheme, then little good would be achieved. Similarly the common dread of cancer could only be lifted if a more hopeful picture of prognosis could be painted. People heard of the patient who died in great pain but nothing of those who were successfully treated and cured. The result was that fear and ignorance rather than apathy acted as a barrier to earlier diagnosis and treatment. Too often people thought that *all* cancer was incurable and that little could be done.

Copies of the leaflet (" Cancer Can be Cured "), the pamphlet ("Cancer in Bristol ") and a reprint of an article (Nursing Times) by Malcolm Donaldson, F.R.C.S., F.R.C.O.G.—" The Role of Nurses and other members of the Nursing Profession in the Education of the Public concerning Cancer "—were distributed to the nurses at the meeting. This, it was thought, would provide them with an understanding of what was being attempted and basic information for education of the public through the selected channels.

Education of the Public. The next step in full implementation of the scheme is to operate in two ways :—

(i) *Individual.* This is already being done by public health nurses in advising individuals who delay in consulting their doctor to do so immediately. This is done in an unobstrusive way when advice is sought, without mentioning cancer by name unless the individual already is fearful of the condition. The leaflet " Cancer Can be Cured " is available to all public health nurses.

(ii) *Group Teaching.* Much group teaching on general health problems is continually being done by members of the department. Some of the aspects already mentioned are covered. No special cancer education talks are given unless specially requested and then only given by chosen personnel. The leaflet " Cancer Can be Cured " is to be distributed in this way as opportunities present themselves. No mass propaganda or distribution of leaflets is at present comtemplated.

Other topics which are being given special emphasis include tuberculosis (spread of infection and method of prevention) ; and home accidents (how caused, how prevented), but these will be more fully reported upon in next year's report. In a short summary it is not possible to do more than outline some of the lines of advance. The most significant development is the now widespread interest of members of the staff in group teaching and their readiness to accept and use visual aids. The result has been that I have been able to spread health teaching over a much broader area than hitherto and to encourage and advise those who lack confidence or experience in group teaching either on the formal or informal plane.

This approach is in direct contrast to certain other public health departments in other parts of the country, who maintain a full-time health education section. By integrating teaching with other work there is no tendency for the staff to shelve teaching as an activity of a specialised section and no tendency to become too removed from the problem of a particular area. It is also probable that a much greater number of talks is given than would otherwise be possible. From the point of view of the co-ordinating officer, I would say that the greatest difficulties now experienced are administrative and organisational in order to meet the demand from so many quarters for assistance.

(II) TEACHING AND TRAINING

by Miss W. J. Gibb (*Sister Tutor*)

Student Health Visitors Training Course

Twenty-two students completed their training in March and twenty were successful at the first attempt on sitting the examination of the Royal Sanitary Institute. The two failures were successful later. There are 23 students in training at present.

A total of 24 were accepted for training from applicants interviewed. A week before commencement of the Course two students withdrew—" owing to vacancies occurring near their homes." The students included the following :—8 Bristol, 1 Berkshire, 1 Devon C.C., 5 Somerset, 7 unassisted.

The present syllabus, being so full, leaves too little time for practical work and very little chance for the students to practice "group education," which is such an important part of the work of the health visitor today. No doubt this will be remedied in the future.

Nursery Nurses

The Assistant Tutor reports a busy year at the Training Centre. 35 students presented themselves for Parts A and B at the examination of the National Nursery Board held in Bristol in July. 30 were successful. There were 33 from the Local Education Authority Nursery Schools and 2 from Downend Nursery. 7 Students entered for Part B of the examination and 1 failed. These students intend taking further training to be Nursery or Infant Teachers.

The standard of students this year did not compare as favourably as last year—owing to the increase in the number of students extra lectures and tutorials have had to be arranged at the training centre leaving less time available for assistance to be given in the training of health visitors and with health education. The Assistant Sister Tutor spends 7½ sessions at the training centre and 2½ sessions assisting the Sister Tutor. Saturday mornings are generally spent in correcting books or preparing notes.

Clinic Assistants—Pre-Nursing

The Assistant Tutor has continued to take a class each week giving some practical instruction when possible.

Health Education in Clinics

The introduction of more visual aids has somewhat interested both audiences and members of the staff taking part in the teaching in these places. The sanitary inspectors have given great assistance and as many as 40 talks have been planned to be given at the various clinics during a term.

External lecturers have decreased considerably but the mothers still appreciate demonstrations on Make and Mend and talks on psychology.

There is a great need for models to assist teaching in the clinics—films and film strips cannot be shown everywhere. The busy mother will not always wait for a talk but no one is too busy to glance at a model which is a talk in itself.

Talks to Clubs and Guilds, etc.

The Sister Tutors have assisted in this important health education work and have found keen and interested audiences everywhere.

1953

1,282 persons contacted.
36 Organisations visited at their Centres.
16 Parties visited and talks given at the Central Health Clinic.
This does not include 21 lectures given to Home Helps by the Assistant Tutor.

1952

884 persons contacted.
25 Organisations visited at their headquarters.
23 Parties to the Central Clinic and talks given.
12 Lectures given to Home Helps by Assistant Tutor.

Frenchay Hospital requested lectures to be given on public health to three groups of nurses. These lectures were followed by visits to the Central Clinic to see some of the work in action.

This is the first hospital to request lectures although it is plainly stated in the new syllabus of the General Nursing Council that public health talks should be given.

Visits are paid each year to the Central Health Clinic by students from the Hospital for Sick Children—a talk always preceeds the tour of the Clinic.

8. BRISTOL AMBULANCE SERVICE

by E. Joy (*Deputy Ambulance Officer*)

The year 1953 represents the first complete year of working since the Ambulance Service was transferred from the Fire Brigade to the Health Department in April 1952.

The most noticeable feature of the year's working has been the continued increase in the numbers of calls made on the service. There was an increase of 21,746 patients carried compared with 1952 and a corresponding increase in mileage of 36,818. The total number of cases dealt with by the Ambulance and Supplementary Services, together with classification and mileage, are set out in the appended tables.

Summary of Cases

Year	Ambulance Service	Hospital Car Service	Taxi Association	Totals
1953	**143,590***	**9,524**	**2,074**	**155,188**
1952	114,554	15,905	2,983	133,442
Difference	+29,036	—6,381	—909	+21,746

* Of this total 310 patients were conveyed to their destination by Rail.

Mileage

Year	Ambulance Service	Hospital Car Service	Taxi Association	Totals
1953	**813,353**	**79,772**	**20,890**	**914,015**
1952	731,969	119,782	25,446	877,197
Difference	+81,384	—40,010	—4,556	+36,818

Classification of Cases carried by the Ambulance Service

Year	Accident and Sudden Illness	Maternity	Infectious Diseases	General	Totals
1953	**7,116**	**3,851**	**1,829**	**130,794**	**143,590**
1952	6,753	3,842	1,615	102,344	114,554
Difference	+363	+9	+214	+28,450	+29,036

The total of 143,590 comprises 39,412 Stretcher Cases and 104,178 Sitting Cases.

Of the Accident and Sudden Illness group 5,211 were Accident and 1,905 Sudden Illness.

Classification of Accident Cases

Sport	Works	School	Home	Road	Total
219	788	141	1,809	2,254	5,211

It will be seen from these tables that the Ambulance Service has dealt with a larger proportion of the total calls in 1953 than in any previous year, while the number of cases passed to the Supplementary Services has shewn a steady decline. This has been achieved largely through the introduction of V.H.F. Radio Telephony and the policy of replacing the saloon cars with the utilicon type sitting case vehicle with its greater patient-carrying capacity.

A disturbing feature of the increased demand for Ambulance Service transport has been the fact that the majority of the increased calls are for sitting case patients. These are patients attending hospitals for various out-patient treatments and have to be transported between the hours of 9 a.m. and 5 p.m. In an effort to cope with this increase a very great burden has been placed on the Control and Driving staff, and unless measures that are being tried in an effort to ease this position are successful, consideration may have to be given to increasing the present establishment of men and vehicles.

The Ambulance Service since its transfer to the Health Department has assumed responsibility for the transport when requested for midwives and analgesia apparatus. Other calls on the service are made, when necessary, by officers of the Mental Health and Environmental Services.

Organisation

The service is responsible for moving patients inside the city boundary to and from hospital or other place of treatment on the request of a doctor, midwife or other suitably qualified person.

In addition, under the terms of an agency agreement, ambulance facilities are provided for Somerset County Council in the parishes of Long Ashton, Dundry, Abbots Leigh, Barrow Gurney, Whitchurch and Keynsham, and for emergency calls only from Chew Magna, Chew Stoke, Stanton Drew and Chelwood Stowey. Similar facilities are provided for the Gloucester County Council in the Kingswood Urban District and parishes of Siston, Oldland, Hanham Abbots and Bitton, and for emergency calls only in the Mangotsfield Urban District and the parishes of Pucklechurch, Wick and Abson.

The area thus covered by the Bristol Ambulance Service amounts to 96,825 acres and serves a population of 532,833. This includes an area of 32,290 acres and a population of 27,976 on behalf of Somerset County Council for infectious diseases only.

Personnel

	Present Strength.	*Establishment.*
Chief Officer	1	1
Deputy Officer	1	1
Clerks	2	2
Control Room Officers	2	2
Station Officers	3	3
Control Room Operators ...	8	8
Driver Attendants	90	90
Total ...	107	107

Premises

The Control Room of the Ambulance Service is situated at the Central Health Clinic, whilst the vehicles are distributed between the following Stations.

Perry Road	6 Ambulances	
Hemplow House ...	11 Ambulances ...	3 Cars
Fishponds	11 Ambulances ...	4 Cars
Feeder Road	... ...	8 Cars

In view of the inadequacy of Perry Road as a central station, it is anticipated that plans will be made during the coming year for new premises to house a greater proportion of the fleet than can be accommodated at Perry Road.

Vehicles

The number of vehicles on the strength of the Service at the 31st December, 1953 was as follows. (This table shows the years the vehicles were purchased).

	1946	1947	1948	1949	1950	1951	1952	**1953**	Total
Ambulances ...	2		3	12	6	1	3	**1**	28
Cars	2			3	1				6
Utilicons ...					2	1	3	**3**	9
Totals ...	4		3	15	9	2	6	**4**	43

One new Ambulance and three new Utilicons were delivered during the year while three ambulances and three sitting case cars were withdrawn from service. This reduced the number of vehicles in the fleet from 45 to 43.

Two of the ambulances withdrawn from service were purchased by the Civil Defence Committee for use in sectional training of the Ambulance Section of the Civil Defence Corps.

Vaccination and Inoculation

It is desirable that all members of the operational staff shall be protected against diseases with which they may come into contact during the course of their duties, and a programme of vaccination and inoculation is in progress to achieve this purpose.

Safe Driving Competition

All members of the driving staff have been enrolled in the National Safe Driving Competition, which is designed to set a high standard of safe and courteous driving.

Maintenance

The maintenance and repairs of all the Ambulance Service vehicles is carried out by the Transport and Cleansing Department.

Radio Telecommunication

At the commencement of the year under review 15 vehicles of the ambulance fleet were equipped with mobile radio sets. In view of the success of this method of communication, it was decided to instal a further 25 radio sets. The installation of these sets was commenced in

December 1953 and it is hoped to complete this programme by the end of January 1954.

Owing to the fact that for the majority of the year only a proportion of the fleet was thus equipped, it is not possible to give details of the effects the radio has made on the work of the service. Without doubt, however, it would not have been possible for the service to meet the increased demands made on it, and at the same time reduce the cases passed to the supplementary services if the use of radio had not been available.

Journeys by Rail

The British Railways, as in the past, have been most co-operative in enabling patients to be sent by rail, thus effecting a considerable saving in cost and allowing vehicles to be retained that would otherwise have been unavailable to "Control" for long periods. The purchase of a Parrott type stretcher by the service has been of great assistance in this direction, as patients have been sent by rail at very short notice, without the necessity of waiting for the railway's equipment to become available.

Co-ordination with Other Authorities

The continuance of excellent relations with the adjoining authorities of Somerset and Gloucestershire has been a feature of the year's working. Close co-operation has enabled all three ambulance services to work to the mutual advantage of each other, resulting in saving of mileage, vehicles and manpower.

Supplementary Services

Although the number of cases passed to the Hospital Car Service and Taxi Association has shown a marked reduction during 1953, it would not have been possible to fulfil all the obligations without the help of these organizations. Between them, they were responsible for the transportation of 11,598 cases involving a mileage of 100,662

Avonmouth Docks Ambulance

The ambulance based at Avonmouth Docks, which is jointly maintained by the Health Committee and the Docks Ambulance Committee, has again proved to be a valuable asset. During the year it responded to 572 cases, of which 471 were incidents actually in the dock area and 101 were in the adjoining area of industrial premises. The knowledge that there is an ambulance in attendance, is particularly comforting both to Ambulance Control and the inhabitants of the area, which, by the nature of the work performed there has a high accident rate.

St. John Ambulance Brigade and British Red Cross

Valuable assistance has been rendered by members of the above voluntary organizations, particularly when acting as escorts to patients travelling by rail. The work has been undertaken efficiently and cheerfully, often at very short notice. The St. John Ambulance Brigade has continued the practice of manning an ambulance with voluntary personnel during the evening hours and week-ends, thereby providing Ambulance Control with an additional vehicle to utilize should the occasion arise.

Civil Defence

Basic Civil Defence training was given to 50 of the Driving Staff during 1953 and it is hoped to commence Sectional Training for the Operational Staff early in 1954.

9. IMMUNISATION AND VACCINATION

DIPHTHERIA IMMUNISATION

NUMBER OF CHILDREN WHO COMPLETED A FULL COURSE OF PRIMARY IMMUNISATION IN THE AUTHORITY'S AREA (including temporary residents) IN THE SIX-MONTHS PERIOD INDICATED.

	Age at date of final injection		Total
	Under 5	5 to 15	
Six Months ended 31st December, 1948 ...	3,390	147	3,537
Six Months ended 30th June, 1949 ...	2,667	601	3,268
Six Months ended 31st December, 1949 ...	2,576	268	2,844
Six Months ended 30th June, 1950 ...	2,525	187	2,712
Six Months ended 31st December, 1950 ...	1,710	95	1,805
Six Months ended 30th June, 1951 ...	2,425	529	2,954
Six Months ended 31st December, 1951 ...	2,573	345	2,918
Six Months ended 30th June, 1952 ...	2,194	114	2,308
Six Months ended 31st December, 1952 ...	2,345	85	2,430
Six Months ended 30th June, 1953 ...	**2,160**	**886**	**3,046**
Six Months ended 31st December, 1953 ...	**1,914**	**253**	**2,167**
And for November & December, 1953 only Immunisation—Diphtheria and Whooping Cough combined	**125**	**2**	**127**

WHOOPING COUGH IMMUNISATION

November/December, 1953	**12**	**33**	**45**

VACCINATION

NUMBER OF PERSONS VACCINATED (or re-vaccinated).							
1952	Age at 31st Dec., 1952 i.e., born in years ...	Under 1 year 1952	1 to 2 years 1951	2 to 4 years 1948-50	5 to 14 years 1938-47	15 years or over before 1938	Total
	Number vaccinated...	740	648	168	154	373	2,083
	Number re-vaccinated	87	90	45	96	831	1,149
1953	Age at 31st Dec., 1953 i.e., born in years ...	Under 1 year 1953	1 to 2 years 1952	2 to 4 years 1949-51	5 to 14 years 1939-48	15 years or over before 1939	Total
	Number vaccinated...	**928**	**707**	**155**	**181**	**299**	**2,270**
	Number re-vaccinated	**150**	**136**	**33**	**75**	**450**	**844**

SECTION C

ENVIRONMENTAL HEALTH SERVICES

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I. SANITARY CIRCUMSTANCES, HOUSING AND INSPECTION OF FOOD

by F. J. Redstone (*Chief Sanitary Inspector*)

Deputy Chief Sanitary Inspector	G. J. Creech
Senior Housing Inspector	C. E. Bowden
Senior Food Inspector	P. Hayter
Senior Port Health Inspector	E. I. Davies

(i) SANITARY CIRCUMSTANCES

Another year has rushed away and once again the time has arrived to record the achievements and failures of our efforts to improve environmental health conditions in this city.

The aftermath of the war years has to some extent prevented rapid progress in the many duties and responsibilities facing all public health authorities. At the same time it must be admitted that an insistent public demand has greatly helped the administrative side of the important and difficult work associated with improvement of housing conditions, safer and cleaner food supplies, cleaner atmospheric conditions and the many allied matters associated with improved environment.

The services operated by the sanitary inspectors call for a great deal of diplomacy and tact, and although sympathetic consideration has been given in all cases, considerable success has been achieved in accelerating the work generally. This has been aided by the use of improved clerical methods which enabled a short staff to handle more rapidly the many thousands of communications, specially worded notices and letters required in dealing with the various matters associated with the dozens of Acts, Bye-laws, Orders and Regulations administered by the department. Some idea of the extent of the work carried out can be gauged when it is noted that to deal with the 3,338 complaints received and other duties resting upon the department, the district sanitary inspectors made a total of 31,326 visits.

During recent years a great deal of new legislation affecting the work of sanitary inspectors has been passed, but the changes envisaged in the Housing and Food Laws by the two Bills now being considered by Parliament will obviously make still greater demands on inspectorial time. Staff shortage has been referred to in previous annual reports and a re-organisation scheme will be necessary if the new responsibilities are to be coped with adequately. The recruitment and training of new public health inspectors has received attention from a Government Committee and it is hoped that their report will be implemented at an early date and lead to the recruitment of worthy successors to a long line of public health pioneers whose work we are proud to carry forward into a new and even healthier era.

Examination successes during the year by officers of the section

The following further qualifications were obtained by officers of the section during the year :—

Home Office Civil Defence Technical Training School : Certificate for Civil Defence General Instruction—J. E. Mountjoy. Part II of Final Diploma of Municipal Administration—R. B. Dumbleton.

Acknowledgment

The Chief Sanitary Inspector takes this opportunity to express thanks to all those who have taken notes as to special points of progress during the year, and have contributed material in the preparation of this report.

Visitors from Foreign Countries

Once again the health department received representatives from other countries who were visiting England to study public health administration and other aspects of local government.

The Chief Sanitary Inspector made arrangements for these visitors to inspect various phases of public health work, including the problems of houses in need of repair, redevelopment areas, food hygiene and control, meat inspection, disinfection and disinfestation problems.

The golden maxim that " public health is public wealth " is true in all communities, and it is now recognised that local health is linked with the health of nations. The results of this appreciation in international and community health organisation and administration are fairly seen in the defeat of smallpox, plague and other serious diseases which, years ago, affected whole centres of population.

Fellow-workers in the public health field have been welcomed from many areas, including the Sudan, Malaya, Nigeria and Kuwait.

Repairs to Property in Owners' Default

At the beginning of the year under review, 24 outstanding cases were being dealt with by the section.

During 1953, 35 cases were referred to the defaults section for consideration, making a total of 59 properties which were dealt with as shown below :—

34 properties were repaired by the Corporation's contractors.

9 properties were repaired by their respective owners after the cases had been referred to the defaults section.

4 cases were not proceeded with, for various reasons.

At the end of 1953, 12 cases were still outstanding, disposed of as follows :—

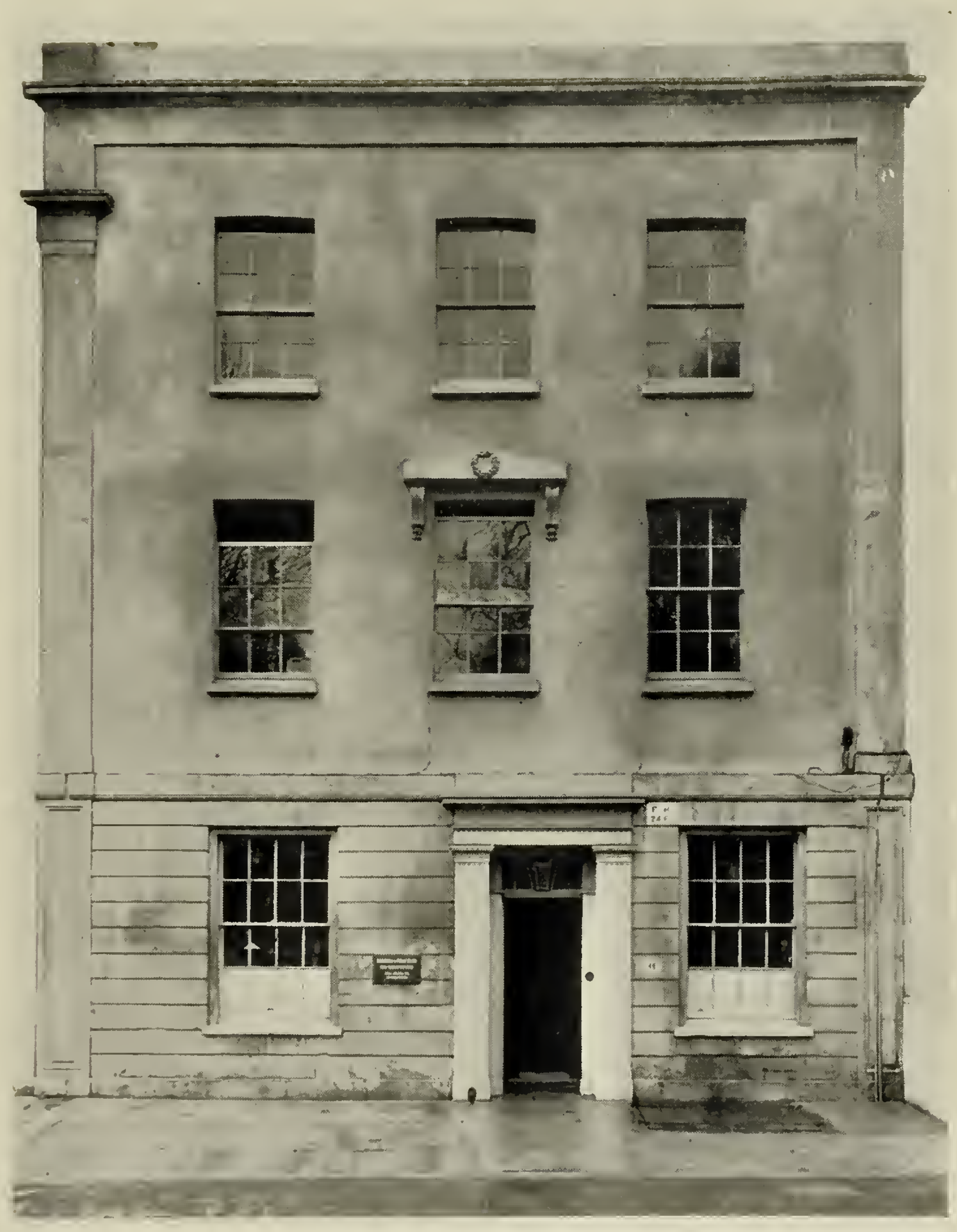
4 properties were being repaired by the Corporation's contractors.

3 properties were being repaired by their respective owners.

5 cases had not been dealt with.

During the year 36 orders were issued to various Corporation contractors and accounts to the order of £1,545 16s. 4d. were passed for payment.

This year saw quite a sharp decrease in the number of cases referred to " defaults " for consideration.



Department of Public Health
Chief Sanitary Inspector's Office, 48 Queen Square, Bristol, 1.

Works by Agreement under Section 275 of the Public Health Act 1936

At the end of 1952, 3 cases of works by agreement were still in the hands of the defaults section.

During 1953, 7 cases were referred to the section for consideration, making a total of 10 cases which were dealt with as follows :—

8 properties were repaired by the Corporation's contractors.

1 case was withdrawn by reason of changed circumstances.

The remaining property was being repaired by the Corporation's contractor at the end of the year.

Accounts for work by agreement paid amounted to £786 12s. 5d. It should be noted that five accounts for work done had not been received from the respective contractors at the end of the year.

General Remarks

During the year, an interesting feature has been the incidence of a number of cases referred to the section, both in default and by agreement, where more than one property has been involved. This has necessitated a most careful and detailed compilation of the relevant accounts by the contractors concerned, and an equally careful apportionment of costs between the owners involved by the inspector in charge of the work. In each case, the Health Committee has been asked to approve the apportionment before the accounts were rendered, and so far any questions raised on the equity of these apportionments have been satisfactorily dealt with by personal explanations.

The Final Reckoning

Action taken by the Corporation to recover the costs of works carried out in default or by agreement from the owners of the properties concerned, is one part of the Corporation officers' work which receives very little publicity.

From time to time the claims section of the Town Clerk's Department asks the Health Department to provide additional information regarding outstanding accounts to answer points raised by owners, but in the main it would appear that the Town Clerk and the City Treasurer are generally able to make satisfactory arrangements regarding the payment of accounts for this kind of work.

In this connection, an interesting case occurred during the year, when, having failed to reach agreement with the owner concerned, the Town Clerk issued a summons against him for recovery of the costs involved in repairing his property under Section 95 (2) of the Public Health Act, 1936. The owner elected to put in a defence and the case was heard by the County Court Judge.

The owner, who conducted his own case, sought to show that the Corporation's contractor had charged excessively for the work carried out, and to this end he produced an estimate from his own builder, which was less than that of the Corporation's contractor. He did not, however, bring his contractor into Court as a witness, and judgement was finally given for the Corporation for the full amount claimed, the Corporation being awarded costs.

SANITATION, HOUSING, SHOPS ACTS, ETC.

anitary Inspection

1952				1953		
Visits	Re-visits	Total		Visits	Re-visits	Total
		3,899	Complaints			3,338
		53	Recommendations for Housing accommodation			35
			Visits :—			
3,763	18,146	21,909	Dwelling-houses (P.H.)	4,077	17,015	21,092
3	4	7	Houses let in lodgings	—	4	4
6	14	20	Common Lodging houses	5	4	9
141	308	449	Foodshops—Registerable	110	218	328
1,261	1,624	2,885	Not registerable	732	1,375	2,107
195	518	713	Other shops	223	549	772
41	129	170	Bakehouses	55	107	162
56	131	187	Workplaces and Offices	58	129	177
61	214	275	Factories—Non-mechanical	39	68	107
293	878	1,171	Mechanical	239	430	669
36	33	69	Outworkers	28	23	51
31	126	157	Removal of Aged Persons	23	26	49
34	242	276	Smoke observations	39	369	408
9	35	44	Offensive trades	16	59	75
53	152	205	Entertainment places	34	145	179
16	155	171	Tents, vans and sheds	31	140	171
63	155	218	Keeping of animals	53	136	189
622	174	796	Food inspection	405	272	677
1,384	2,150	3,534	All other matters	869	1,513	2,382
—	—	—	Sites	36	78	114
—	—	—	Institutions, Hospitals, etc.	4	6	10
9	30	39	Infectious diseases	18	—	18

1952					1953			
Intimation	Statutory	Compliance			Intimation	Statutory	Compliance	
		I.	S.				I.	S.
				Notices :—				
636	861	686	549	Dwelling-houses (P.H.) ..	539	538	529	449
—	—	—	—	Houses let in lodgings	—	—	—	—
—	—	—	—	Common lodging houses ..	—	—	—	—
3	—	1	—	Foodshops—Registerable ..	1	—	1	—
111	—	99	2	Non Registerable	68	1	53	1
58	—	52	—	Other shops	33	—	38	—
4	—	8	—	Bakehouses	—	—	2	—
—	—	1	—	Workplaces and Offices ..	—	—	3	—
41	—	11	—	Factories—Non-mechanical ..	—	—	—	—
69	—	57	—	Mechanical ..	35	—	29	—
—	—	—	—	Outworkers	—	—	—	—
—	—	—	—	Removal of aged persons ..	—	—	—	—
2	—	—	—	Smoke observations	—	1	—	1
—	—	—	—	Offensive Trades	1	—	—	—
1	—	1	—	Entertainment Places	—	—	—	—
—	—	—	—	Tents, vans and sheds	1	—	1	—
—	—	—	—	Keeping of animals	2	—	1	—
4	—	3	—	All other matters	2	—	2	—

Remedial Action

1952		1953
	Drainage Works :—	
7	New drains laid	11
145	Drains repaired	82
545	Choked drains cleared	421
50	Tests made	50
	Sanitary Conveniences :—	
27	Flushing appliances introduced	13
13	Additional closets fitted	2
4	Separate closets for sexes provided	—
54	New pans fitted	34
1	Action re bathroom and geyser vent	7
—	Urinals fitted	—
296	Other works	64
37	Intervening vent space provided	20
5	Cesspools abolished	—
	Water Supplies :—	
3	New and additional installations	1
94	Hot water installed	31
—	Wells closed	—
	Other Sanitary Fittings :—	
26	New sinks fitted	42
1	Additional sinks provided	—
31	Wash basins provided	13
	Other Works :—	
432	Roofs repaired	455
321	Dampness remedied	253
1,733	Other new and repair works	1,612
28	Yards paved and drained	6
39	Houses cleansed—Dirty	4
103	Verminous	29
1	Food Store installed—cooking facilities improved	—
40	Lighting improved	35
7	Ventilation improved	11
1	Meal rooms provided	1
4	Heating provided	3
2	Exhumations	3
	Keeping of Animals :—	
—	Removal of manure	—
—	Provision of manure receptacles	—
1	Drainage provided	—
	Aged and Infirm Persons :—	
13	Removals—Voluntary	1
4	Court Order	1
	Smoke Observations :—	
17	Infringements—Found	5
17	Remedied	5
	Noise :—	
14	Nuisances Found	—
14	Abated	—
	Other Nuisances :—	
284	Found	165
284	Abated	165

(ii) HOUSING

Housing and Replanning

One environmental factor which as much as any other affects the solution of health problems is the provision and maintenance of healthy housing. This has been a major problem for many years and, apart from the routine work of repair or demolition carried out in the more normal activities, the Health Department has maintained a policy of close co-operation with other corporation officers concerned with the proper housing and replanning of the city.

To this end, many meetings have been attended by the Chief Sanitary Inspector, or his deputy, and thousands of houses have been inspected by the staff in connection with specific areas subject, or likely to be subject, to residential replanning. It is obvious that the new dwellings which will arise for rehousing will contain many facilities which have been lacking in much of the ill-planned and badly sited dwelling accommodation occupied in past years.

It is true to say that practically all the dingy courts and alley-ways were swept away between the two great wars but, if the benefits of the city health services are to be achieved in full, more attention will need to be given to the large areas of sub-standard and blighted properties still used for human habitation.

The Clearance of Unfit Houses

As far back as 1950, the Bristol Housing Committee resolved, among other things, to allocate from their housing programme an annual total of 200 dwellings so that a degree of redevelopment might be started in larger areas of worn-out property, and agreed to consider at a later stage a further allocation of 300 dwellings for slum-clearance purposes.

During 1953 it became very evident that in many cases piecemeal action could no longer provide the answer to the problem of unfit properties, and accordingly a small clearance programme was commenced.

It will be well known that the very nature of clearance area procedure under the Housing Acts does much to determine the speed at which these schemes can proceed, but as the year ended two areas (containing 33 houses) had been viewed by the Housing Committee, who agreed to recommend the City Council to make Clearance Orders, and two other areas (containing 17 houses) were in varying stages of development. In addition to this a large number of areas have been earmarked for this procedure, and it is hoped that these will be systematically dealt with.

This method of dealing with old insanitary dwellings on a block basis is only part of the clearance work carried out by the department. For instance, the housing surveys made and mapped out during the immediate post-war years have enabled the department to give valuable and specific information regarding the condition of dwellings included, or to be included in redevelopment schemes.

Moorfields Area

The Moorfields area contains 174 dwelling houses of which a high percentage are so unfit as to justify immediate action by way of clearance-area procedure. The majority of the remainder can only be given limited life. It was appreciated that to condemn and demolish the bad houses would remove one evil and produce others in its place. Void uncontrolled sites, risk of nuisance from rubbish and rats, houses left without support

Housing Acts

1952		1953
	Inspections :—	
—	Section 9	—
97	Section 11 and 12	94
—	Clearance Area	33
	Represented to Committee :—	
—	Section 9	—
94	Section 11 and 12	94
—	Clearance Area	33
	Orders made :—	
57	Section 11 (demolition)	57
16	Section 12 (closing orders)	16
2	Section 11 (undertakings to repair accepted)	2
6	Section 11 (undertakings not to use accepted)	6
—	Section 10 (Local Government (Misc. Provisions) Act, 1953—closing orders whole house)	7
	Houses Repaired :—	
—	Section 9—Informal	—
—	Section 9—Formal	—
—	Section 9—Formal by Corporation in default	—
7	Undertakings to repair	7
4	Undertakings not to use cancelled after repair	4
2	Other repairs	2
10	Rent Certificates issued	10
2	Closing Orders determined after repair	2
—	Demolition Orders Revoked and Closing Orders substituted)—Section 11 Local Government (Misc. Provisions) Act, 1953)	2

1952		1953
	Section 15—*Appeals against Demolition Orders* :—	
1	Appeal dismissed	—
—	Appeal upheld	1
1	Withdrawn	—
1	Hearing pending	—
	Section 155 :—	
2	Recovery of possession : Orders obtained	1
—	Hearing pending	—

are but a few of the undesirable by-products of piecemeal action. The position is further complicated in that the area is scheduled for educational purposes. As a result of a meeting between officers of the departments concerned, it was decided to deal with the whole area under Education Act powers. Towards the end of this year the Council made a compulsory purchase order, and a public enquiry is awaited.

Barton Hill Redevelopment Scheme

The annual report for 1952 made mention of the Barton Hill redevelopment scheme, indicating that the Council had made a compulsory purchase order under Part V, Housing Act, 1936, affecting a built-up area of 21 acres, upon which stand, with other buildings, 624 dwelling houses. A large number of the 150 appeals to the compulsory purchase order were withdrawn by the time the public enquiry was held ; of those that remained to be heard a substantial number were on the grounds that the properties were not unfit and one appellant took the point that the order was bad in that Part V of the Housing Act, 1936, was not intended for schemes of this kind. Submissions were made both by the appellant and Council on the meaning of " house " and " land " as far as this part of the Act was concerned. A period of six months elapsed before the Minister announced his decision in favour of the Corporation.

A large number of houses have already been acquired, tenants rehoused, services cut off, usable materials salvaged and demolitions commenced. Redevelopment, aiming to rehouse a similar number of people to those displaced, is by way of flats, one block will be fifteen storeys in height.

The Barton Hill scheme is a very good example of integrated action by many Corporation departments and, whilst the case for action rested substantially with the Medical Officer of Health, the work of redevelopment carried out by other departments will cause a large number of unfit dwellings to disappear.

County Court Appeal—Section 11—Housing Act, 1936

During this year one appeal was entered against a Demolition Order made by the Council and the Court decided in favour of the appellant and the order was quashed. The owner contended that his offer to give an undertaking not to use the house for human habitation should have been accepted. The Council endeavoured to show that : (1) the house was unfit for human habitation ; (2) the house could not, having regard to all the factors, be made fit ; (3) in these circumstances the implied meaning of " future user ", i.e. its future use for human habitation, precluded the local authority from accepting an undertaking " not to use ". The appellant conceded (1) and (2) but argued that the authority were wrong in placing upon the term " future user " such a restricted meaning. The case became one of legal interpretation, and after hearing submissions by both sides, the Court decided in favour of the appellant. The implication of this decision is that undertakings "not to use" should only be rejected by the authority where the house is so far ruinous as to be unusable or is imminently dangerous.

Local Government (Miscellaneous Provisions) Act, 1953

The above Act came into force on 14th August, 1953, and Sections 10 and 11 are relevant as far as the housing activities of the local authority are concerned. These sections empower an authority to exercise a discretion in such cases where the demolition of a building would affect adjoining property :—

(*a*) In the case of Section 10—by making a Closing Order instead of a Demolition Order on houses dealt with by way of Section 11, Housing Act, 1936, after 14th August.

(*b*) in the case of Section 11, by substituting a Closing Order for a Demolition Order on a house dealt with before 14th August.

Whilst these sections can be useful in specific cases, the absence of any reference to the degree of effect which the demolition of one building may have upon its neighbour, adds substantially to the responsibility of the local authority, and opens up in the case of (*a*) yet another avenue of appeal to the County Court.

Whilst it may be too early as yet to comment upon the new Housing Repairs and Rents Bill, the power to be given to local authorities to acquire houses of demolition order type may well have the effect of reducing the number of Closing Orders made under the Local Government (Miscellaneous Provisions) Act, 1953.

During the year seven Closing Orders have been made under Section 10 of the new powers and two in substitution for operative demolition orders.

Proposed Amendment of Legislation

The Minister of Housing and Local Government has intimated that it is the intention of the Government to amend the Underground Room Regulations, having in mind the new Building Bye-laws which authorities have adopted or are about to adopt. In this connection the Minister requested the Association of Municipal Corporations for comment on his draft proposals. Bristol was requested to submit evidence on this important matter and much thought and time were spent upon it.

It would appear also that the Minister is being pressed to define " reasonable cost " for the purpose of Sections 9 and 11 of the Housing Act, 1936, and he asked for our comments on a formula produced to this end. A study of the formula proved interesting and informative and observations have been submitted.

Void Sites

In common with most of the larger local authorities, Bristol has been carrying out surveys of void sites, and considering the possibility of redevelopment for housing-purposes where this is consistent with the development plan. Many of these sites are the result of Clearance Area action taken before the war. In the majority of cases such sites are not large enough to permit development in accordance with Planning and Byelaw standards and in a large percentage of cases the sites are surround by old and unfit properties which would have to be dealt with under the Housing Act 1936/49. These circumstances have called for surveys to be made of properties adjacent to void sites, with a view to enlarging the area by slum-clearance procedure. Much useful work has been carried out on these surveys by the inspectorate in collaboration with the Housing Manager's Department.

Movable Dwellings

Close attention was again given to the use of land in the city area by occupants of tents, vans and sheds. The Public Health Act safeguards the position of campers and similar occasional use, but every effort is made to prevent the establishment of semi-permanent colonies of these temporary dwellings.

Complaints were received regarding unlicensed occupation of land in some areas and the necessary action was taken to clear the sites. In a few cases the Health Committee granted licences for limited occupation to building firms and others who needed temporary accommodation for key workers.

(iii) INSPECTION OF MEAT AND OTHER FOODS

Meat Inspection

A total of 159,912 carcases of meat were inspected at the Gordon Road Abattoir, Hotwells Lairs, bacon factories and various other institutions in the city. This was an increase of 25,674 carcases over the 1952 figures.

Whole carcases condemned increased by 192, but the total amount of meat condemned was 24 tons less than the previous year.

Seventy-seven specimens from animals infected with Cysticercus Bovis were confirmed in 1953 compared with 151 in 1952.

Public Abattoir, Whitehall

This abattoir, situated at Gordon Road, was erected in 1935 by the City Council to meet the growing demand for improved slaughtering facilities, and its capacity was at that time designed to offer humane and hygienic facilities as an alternative to certain slaughterhouses in use at that time.

The use of slaughtering facilities at this public abattoir increased considerably from 1935 until 1940 since when the premises have been used solely under the Ministry of Food (Control of Livestock and Slaughtering) Scheme.

From that time, great pressure on all available space was created and many temporary lairs and other extensions were pressed into use. The position thus created was not in the best interests of public health or the humane handling of food animals and also had an adverse effect upon the end product, i.e. the quality of the meat.

Realising this, the Health Committee, after consultation with the Ministry of Food (Slaughtering Division) embarked upon a scheme to improve the lairage and slaughtering facilities, together with suitable offices and other welfare provisions for the various staffs employed on the premises.

The whole question of slaughtering policy was under consideration by the Government when these improvements were being discussed and it was with some considerable difficulty that a modified scheme of improvement was eventually agreed and commenced as the year ended.

In view of the numerous proposals and counter proposals put forward by interested bodies connected with the meat and livestock industry, and the lack of a declared Government policy at this stage, the Health Committee were unable to proceed further with the previously planned scheme for a meat precinct situated between Shirehampton and Avonmouth. It is hoped that long before the next annual report is due, a considerably clearer picture of arrangements for the satisfactory slaughtering and marketing of meat will have been settled, so that local authorities may establish a more normal administration of their responsibilities in this connection.

Diseases of Animals Act—Flame Guns

Reference was made in my last annual report to the use of flame-guns for the destruction of carcases of animals in cases of anthrax and other diseases where immediate destruction is necessary.

The 12 flame-guns which were purchased have been used during the year with very satisfactory results for the destruction of 129 carcases infected with swine fever. In addition, the flame-guns were of value to a neighbouring authority which was faced with the problem of destroying an anthrax carcase and had no facilities readily available.

Inspection of Meat and Other Foods

1952		1953
	Visits :—	
319	Meat Markets	294
7,111	Shops	7,386
—	Cattle Markets and Railway Sidings	—
—	Fish Curing premises	—
83	Sausage-making premises	85
10	Cold Stores	31
—	Street traders	6
20	Institutions	7
1,451	Slaughterhouses	1,414
	Remedial Action :—	
—	Slaughterhouses cleansed	—
—	Slaughterhouses rebuilt, repaired or altered	—
—	Sanitary defects, etc.	—

1952			1953	
City	Abattoir		City	Abattoir
		Animals examined :—		
12,355	13,928	Beasts	12,024	13,592
530	232	Calves	159	92
30,069	27,050	Sheep	39,675	37,792
807	6,326	Pigs	2,504	13,681
—	—	Pigs (Imported)	—	—
42,919	—	Pigs, bacon	40,390	—
—	1	Goats	—	—
		Carcases destroyed :—		
168	380	Beasts	147	308
4	9	Calves	4	4
48	80	Sheep	84	85
147	144	Pig	189	346
—	—	Goats	—	—

Foods—Fish and Canned Goods Condemned

	Tons	*cwts.*	*qrs.*	*lbs.*	*Tons*	*cwts.*	*qrs.*	*lbs.*
		FISH				OTHER		
1953	13	7	1	4	33	6	1	4
1952	12	4	3	7	10	1	3	6

Animals Examined

1952					1953			
Hotwells Lairs	Abattoir	Bacon Factories and City	Total		Hotwells Lairs	Abattoir	Bacon Factories and City	Total
12,355	13,928	—	26,283	Beasts	1,204	13,592	—	25,616
530	232	—	762	Calves	159	92	—	251
30,069	27,050	—	57,119	Sheep	39,675	37,792	—	77,467
807	6,326	42,940	50,073	Pigs	2,507	13,681	40,390	56,578
—	1	—	1	Goats	—	—	—	—
43,761	47,537	42,940	134,238		54,365	65,157	40,390	159,912

Carcases Destroyed

1952									1953							
Hot-wells Lairs		Abat-toir		Bacon Factories & City		Total			Hot-wells Lairs		Abat-toir		Bacon Factories & City		Total	
TB		TB		TB		TB			TB		TB		TB		TB	
151	17	320	60	—	—	471	77	Beasts	120	27	248	60	—	—	368	87
—	4	—	9	—	—	—	13	Calves	—	4	—	4	—	—	—	8
—	48	—	80	—	—	—	128	Sheep	—	84	—	85	—	—	—	169
8	14	82	62	83	42	173	118	Pigs	12	31	115	236	102	44	229	311
—	—	—	—	—	—	—	—	Goats	—	—	—	—	—	—	—	—
159	83	402	211	83	42	644	336		132	146	363	385	102	44	597	575

Inspection of Meat and Other Foods

1952		1953
Tons		Tons
	Meat destroyed from :—	
229¼	Slaughterhouses and shops	212½
266¼	Abattoir	258
—	Cold Stores	—
126¾	Fish, poultry, vegetables, etc.	50¾

Percentages of Carcases Destroyed of Animals Examined

	1952		1953	
	T.B. only.	*All carcases including T.B.*	*T.B. only.*	*All carcases including T.B.*
Beasts ..	1·79%	2·05%	1·39%	1·77%
Calves ..	—	1·7%	—	3·2%
Sheep ..	—	·2%	—	1·04%
Pigs ..	·34%	·58%	·404%	·94%

Total Weight Meat Condemned

	1952				1953			
	Tons	Cwts.	Qrs.	Lbs.	Tons	Cwts.	Qrs.	Lbs.
Hotwells Lairs ..	168	17	3	21	158	5	—	7
Abattoir	258	7	1	7	256	19	2	8
Bacon Factories..	43	6	—	8	33	9	1	7
City and Butchers' Shops	14	18	—	26	12	13	—	13
	485	9	2	6	461	7	—	7

Carcases Inspected and Condemned 1953

	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs	Goats
Number killed	25,616	—	251	77,467	56,578	—
Number inspected	25,616	—	251	77,467	56,578	—
All diseases EXCEPT tuberculosis :— Whole carcases condemned	103	—	8	169	319	—
Carcases of which some part or organs were condemned	16,863	—	26	13,876	1,452	—
Percentage of the number inspected affected with disease other than tuberculosis	65·82%	—	10·35%	17·96%	2·56%	—
Tuberculosis only :— Whole carcases condemned	352	—	—	—	221	—
Carcases of which some part or organs were condemned	5,450	—	3	—	1,874	—
Percentage of the number inspected affected with tuberculosis	21·27%	—	1·19%	—	3·31%	—

(iv) MILK AND FOOD INSPECTION

New Legislation

The new legislation which became operative during the year affecting the Department was as follows :—

The Offals in Meat Products Order, 1953, revoked the minimum meat-content of meat products but prohibited the use of certain specified offals in the preparation of any uncooked open meat product. In the case of sausages, samples examined since the date of the Order have closely complied with the original standards.

The Public Health (*Infectious Diseases*) *Regulations*, 1953, empower a local authority to prohibit " carriers " of certain diseases or persons suffering from infections likely to cause food-poisoning, from engaging in the preparation of human food.

The Labelling of Food Order 1953 substantially re-enacts the 1950 Order.

The Public Health (*Preservatives etc. in Food*) *Regulations* 1953 amend the permissible preservatives in certain foods.

The Food Standards (*Ice Cream*) *Order*, 1953, reimposed the chemical standard for ice cream which had been reduced in 1952.

The Cream and Use of Milk (*Revocation*) *Order* 1953 removed restrictions on the use of milk and cream but the chemical standards for cream remain in force.

The Food Standards (*Preserves*) *Order* 1953 amended the compositional standard of certain jams, marmalades, etc.

The Merchandise Marks Act 1953 extends the definition of " trade description " and " false trade description " and increases penalties contained in the 1887 Act.

The Food Standards (*Saccharin Tablets*) *Order* 1953 prescribes standards for saccharin tablets and sweetening tablets containing saccharin.

The Public Health (*Condensed Milk*) (*Amendment*) *Regulations* 1953 permit—until 1955—the importation by the Ministry of Food, of condensed milk containing a reduced standard of fats and solids.

The Milk (*Special Designation*) (*Pasteurised and Sterilised Milk*) *Amendment Regulations* 1953 permit the processing of sterilised milk in containers other than bottles and as from the 1st October, 1954, the Regulations require all pasteurised milk to be placed in containers with overlapping covers ; churns to be sealed.

Memo 3/Meat. In December 1952 the Ministry of Food issued a revised Memorandum on methods suggested for the inspection of meat for human consumption. It replaced the former " Memo 62 " and the Ministry suggested its adoption in February, 1953.

The Memorandum has no legal force, but it provides advisory authority for the detention of carcases or parts of carcases for bacterial examination ; for the control of admission to a slaughterhouse of carcases of animals slaughtered for emergency reasons ; for the sterilisation of implements ; for the detailed inspection of carcases and organs ; for the additional detailed inspection of carcases infected by tuberculosis and the action to be taken where certain specified infections are discovered.

The Milk and Dairies (*Amendment*) *Regulations*, 1953, amend the definition of a milk " distributor " to exclude a purveyor of cream in sealed containers.

Disposal of Condemned Meat and Offal. The Ministry of Food in December 1953 issued a circular outlining arrangements made for the disposal of condemned meat and offals. These are sold by auction periodically, subject to the purchaser—before resale :—

(*a*) Having it boiled, processed or sterilised ; or

(*b*) selling it raw to a retailer for sale as animal food with a sales contract to treat it by boiling, processing or sterilising ; or

(*c*) selling it to the owner of a zoo, menagerie or similar establishment for use in his business.

A seller of raw condemned meat must notify the Medical Officer of Health of the name and address of any consignee.

These arrangements apply only to meat from slaughterhouses occupied by the Ministry—others premises are not included, the only requirements being that condemned meat must be stained green. Moreover, there is nothing to prevent diseased meat from knackers' yards being sold to pet-shops without prior treatment by sterilisation.

FOOD INSPECTION

Synthetic Cream

"*Whipped Cream*". Samples of this commodity on sale in shops were secured and were found to be " highly unsatisfactory " bacteriologically. It was a well-known proprietary brand which was being whipped with sugar in a local bakery. An inspection of the premises revealed insufficient attention to the sterilisation of equipment. Following advice on this matter, further samples were reported as satisfactory.

Cream

Samples of cream secured from a local dairy revealed exceptionally high bacteriological counts. Investigation revealed that sterilisation of pans and carton-filling methods were not satisfactory. As a result of advice, improvements were immediately carried out.

Pickled Ham

A slight outbreak of toxic food-poisoning at a school was suspected as being due to ham which had been prepared by a butcher and cooked at the school. Some of the ham was obtained and samples of pickle were secured at intervals. No salmonella or dysentery organisms were found, but staphylococcus aureus was revealed in the ham and later in some samples of the pickle. Pickle tanks were cleaned out and subsequent samples showed scanty growths of staphylococcus aureus. It could not be concluded that this caused the illness at the school, because one of the helpers had been ill prior to the outbreak with a heavy cold which may have caused the food infection.

A proprietary vegetable food

Arising from a notified case of food-poisoning, a sample of a vegetable food was secured and reported to contain streptococcus faecalis and heavy growths of bacteria. Other samples secured from shops gave the same results. The local retailers were contacted and they agreed to withdraw stocks ; the manufacturer's attention was also drawn to this matter.

Iced Lolly

Early in November the department's attention was drawn to a shopkeeper selling iced lollies with an initial in ink on the stick ; children returning sufficient initials to make a word were rewarded with a firework. The shopkeeper was contacted and immediately ceased this method of boosting his sales.

Meat Pies

A number of meat pies of various kinds were submitted for analysis, but there is no standard of composition. The Public Analyst reported meat-filling percentages varying from 13·39 to 87·4.

Halibut Liver Oil Capsules

In several instances samples showed deficiencies in Vitamin A content. The deficiency was due to long storage and proved to be old stock which was destroyed upon representation to the shopkeepers.

Cold and Influenza Mixture

A bottle of this preparation made up by a local chemist lacked the information required by the Pharmacy and Medicines Act, 1941, nor did it claim to be of B.P. standard, but it did claim to " cure " influenza. Upon representations to the chemist he withdrew the mixture from stock.

Cream Cheese

Samples of what was sold as " cream cheese " were secured and the Public Analyst reported that on the basis of a minimum 50% of butter fat in cream cheese, these samples were 89% and 96% deficient in fat. Investigation revealed that it was a Polish product called " Twarog ", meaning " curd " ; that it is not intended for sale as " cream cheese " ; and that it is stocked for purchase by foreigners who are aware of its composition. The vendor was advised and agreed not to sell it as " cream cheese ".

Canned Tomato Soup

Several samples were reported to contain an excess of tin, sufficient to cause intestinal irritation. These were found to be old stock which was destroyed.

Butter

A sample of this was found to contain 9·4% excess water. Repeat samples were satisfactory.

Lemon-juice

A sample of this was found to contain 1·5 mgms. of ascorbic acid Vitamin C instead of the usual 30 to 70 mgms. per 100 ml. The stock was withdrawn.

Dandelion Coffee

A sample was reported upon as prepared from roasted dandelion root with glycerine and caramel, but with no caffeine or chicory which is required in coffee. This appeared to be a " misdescription " within the Merchandise Marks Act, 1887, but Section 18 exempts descriptions applied to goods before the passing of the Act—as is the case with dandelion coffee.

Sciatica Remedy

" Sciatica remedy " was certainly not expected to be infested with a species of book louse, which in fact it was, and had to be destroyed. The explanation was that it was a herbal product which had to be infused by boiling water. The infestation arose no doubt from the crevices in the carton package.

Lollie Kreme

A confection on the market under this description sampled in the year, is a hybrid ice cream and lollie. It has not been decided whether it comes within the controls exercised over ice cream or should be classed as a " lollie " for which there is no chemical standard. This is under active consideration at present.

Bread

A portion of bread and a portion of cooked potato, each contained an offensive-looking black deposit in the substance. The bread was found to contain some burned dried fruit, and the potato an area of gelatinised starch which had discoloured in cooking. It was thought to be due to some abnormality during growth.

Cheese

A complaint of " glass fragments " in cheese resulted in the Public Analyst reporting on a sample, that the " glass " was disodium hydrogen phosphate crystals, arising from the use of sodium citrate to emulsify the fats. This is a recognised practice and the crystals are harmless.

Fish Frying Oil

As a result of complaints of illness after eating fried fish, an investigation was made by procuring a number of samples of fish-frying oil from all parts of the city. It was found that the frequency of changing the frying medium varied considerably from a few weeks to many months, and it is customary to " top up " the oil from time to time. The type of oil in use also varies, some using palm kernel oil, some dripping and some a mixture of both, so that the development of rancidity varied in time. This investigation was followed by sampling over a period of ten days from one fish-fryer using palm kernel oil only. These samples suggested that by the daily boiling and " topping up " the frying medium might be used indefinitely, but in this particular case the oil was in fact changed fortnightly.

Eggs

A message was received from the Egg Division of the Ministry of Food that some shopkeepers had had complaints of bad-tasting eggs, imported from Ireland. It was thought to be due to washing the eggs.

A dozen were secured from the same source and the Public Analyst reported slight traces of chlorine in washings from the egg-shells, of which there would be little if any penetration of the shell. The eggs, when opened, with one exception, were sound.

Meat Products

Complaints were received respecting unsatisfactory meat products on four occasions. In two cases they proved to be stock that had been kept unduly long for this type of food by the shopkeeper, and warnings were issued. In the other two cases no laxity could be established.

Cordial

A complaint of flies in black-currant cordial was traced to the fact that the cork had blown out of the bottle. By the time it was discovered, fruit-flies had invaded the bottle, which was recorked. It was sold by the shopkeeper in good faith.

Foreign Bodies

Complaints were also received respecting metal foil, glass and dirt in bottles of milk ; cockroach, string and nail in bread ; foreign bodies in sweets ; pencil marks on a loaf ; mouse excreta in a tart ; and legal action was taken in two cases. Warnings were issued in all other cases.

MILK INSPECTION

Milk—Undesignated

Samples of milk taken for examination for tuberculosis or abortus infection totalled 281.

Two were reported as infected with tuberculosis, but these were of milk consigned to a pasteurising dairy. 28 were reported as containing Brucella abortus organisms, of which 12 were intended for sale as raw milk, from five different producers. The remainder were taken prior to pasteurisation.

Of the five producers, three were resampled and cleared, and in two cases the milk is now being pasteurised ; in one of these cases a notice was issued by the Medical Officer of Health under the Milk and Dairies Regulations to a farmer within the city boundary.

Three outstanding cases of tuberculous raw milk discovered in 1952 were cleared early in 1953.

Milk—Designated

A total of 14 dairymen were licensed to pasteurise milk and two to sterilise it.

855 licences have been issued to persons selling these milks and 166 were licensed to sell Tuberculin Tested or Accredited milk. 708 samples of pasteurised and sterilised milk were secured and 46 failed to pass the statutory tests. 35 samples of Tuberculin Tested or Accredited milk failed the methylene-blue test out of 186 samples secured for examination.

Samples of Tuberculin Tested milk were regularly secured from the Ministry of Health Tuberculin Tested farms, and in no case was evidence of Brucella abortus revealed.

Ice Cream—Registration of Premises, Section 14, Food & Drugs Act, 1938

The majority of ice-cream sellers continue to sell the wrapped article in spite of suggestions that loose ice cream with biscuits is returning to favour.

235 samples were submitted for chemical analysis and two only were reported below the standard. These were from one manufacturer who became careless with his recipe. A written warning rectified the position.

252 samples were submitted for bacteriological examination and it is pleasing to report that only 27 were classed in Grades 3 or 4.

Milk and Food Inspection—Schools, School Kitchens and Other Corporation Establishments

During the year 232 samples of pasteurised milk from schools were secured, 15 failed the statutory tests and appropriate action was taken in each case.

262 samples of various foods from five school kitchens all proved satisfactory except that in one or two cases, cereals were mite-infested and had to be destroyed.

92 samples of assorted foods were also obtained for analysis from other Corporation Establishments.

Food Samples Reported by the Public Analyst as Unsatisfactory

During the year, 210 formal and 2,548 informal samples were submitted to the Public Analyst under the Food and Drugs Act, 1938. On the estimated population of 443,900, this represents 6·2 per thousand. 47 were reported " not genuine ". 23 of these were milk. Action taken in respect of these 47 is reported elsewhere in this report.

Fertilisers and Feeding Stuffs

37 formal and 31 informal samples were secured for analysis.

Eight were reported as in some way not complying with the Act. Legal proceedings were taken in respect of two samples and in other cases warning letters were sent. Repeat samples complied with the requirements of the Act.

Legal Proceedings

Legal proceedings were taken in the following cases :—

Glass in a bottle of milk	Case proved but dismissed under a defence section of the Food and Drugs Act, 1938.
Water in milk	Fine of £2.
Obstruction of Sampling Officer ..	Case dismissed—conflict of evidence.
Dirt in bottle of milk	Fine of £2 and £2 10s. costs.
Dirt in bottle of milk	Fine of £2.
Sale of food unfit for human consumption. (*Two meat pies*) ..	Fine of £10, £2 2s. costs, and 10s. expenses.
Sale of Fertilisers without a Statutory Statement	Fine of 10s. in one case, other case dismissed.
Water in milk	Cases pending.
Nail in bread	

Sampling of Rag Flock and Other Filling Materials

61 samples of filling materials within the meaning of the Rag Flock and Other Filling Materials Act were secured for analysis during the year, but in no case was any action required by the department.

Notices Served

65 notices were served during the year and 64 were complied with; this includes some outstanding at the end of 1952.

Registerable Food Premises

A total of 187 premises are now registered for the preparation of food, including shellfish and 35 are registered to manufacture ice cream.

The premises were regularly inspected, and samples of the foods were submitted for chemical and bacteriological examination.

Food Poisoning

A great deal of general investigation and field work was carried out by the Sanitary Inspectors in connection with food-poisoning cases and every effort was made to identify the source of infection. Apart from the Clean Food Campaign, much advice was given during these investigations in regard to improved standards of hygiene. A comprehensive report on the occurrence of food-poisoning in the city appears elsewhere in the report of the Medical Officer of Health.

Dairies and Milkshops, etc.

1952	REGISTRATIONS	**1953**
	Milk & Dairies Regulations 1949	
74	Dairies	**15**
74	Distributors	**109**
	Milk (Special Designations) Regulations 1949	
14	*Pasteurised :* Dealers' (Pasteurisers) Licences	**14**
337	Dealers' Licences	**363**
11	Dealers' Supplementary Licences	**20**
2	*Sterilised :* Dealers' (Sterilisers) Licences	**2**
428	Dealers' Licences	**467**
2	Dealers' Supplementary Licences	**5**
147	*Tuberculin Tested :* Dealers' Licences	**148**
11	Dealers' Supplementary Licences	**14**
12	*Accredited :* Dealers' Licences	**4**
—	Dealers' Supplementary Licences	—
	Food & Drugs Act 1938	
37	Manufacture, Storage and Sale of Ice Cream	**35**
1,016	Storage and Sale of Ice Cream	**1,067**
174	Preparation of sausages, or potted, pressed, pickled or preserved food	**187**
125	Fish Frying premises	**154**
11	Butter Factories	**11**
38	Wholesale Dealers in Margarine	**39**

1952	OTHER REGISTRATIONS, LICENCES, ETC.	1953
	The Rag Flock & Other Filling Materials Act, 1951.	
—	Licences and manufacture rag flock	—
4	Licences to store rag flock	**4**
33	Premises registered to use filling material	**30**
	Pet Animals Act 1951.	
19	Licences to keep a pet shop	**26**
	Pharmacy & Poisons Act 1933.	
556	Listed sellers of Part II Poisons	**591**
	Slaughter of Animals Act, 1933.	
77	Licensed Slaughtermen	**76**
	Food & Drugs Act 1938—*Section* 57.	
4	Licensed Slaughterhouses (Bacon factories)	**4**
2	Licensed Knackers' Yards	**2**
	Public Health Act 1936.	
	Offensive Trades—Annual consent :—	
7	Premises	**7**
10	Trades	**10**

Dairies, Milk Shops, Etc.

Samples Taken	Samples not Satisfactory	Chemical Analysis	Samples Taken	Samples not Satisfactory
1952			1953	
692	55	Milk	**515**	**29**
280	4	Ice Cream	**235**	**2**
1,552	21	Other Foods	**1,676**	**24**
115	—	Medicines and Drugs	**332**	**10**
33	1	Rag Flock	**61**	—
—	—	Fertilisers and Feedings Stuffs	**68**	**8**
114	2	Water (Baths)	**109**	**34**
179	38	,, (Others)	**90**	—
115	—	Miscellaneous	**176**	—
		Bacteriological Examination :—		
90	—	Milk T.B. exam. : City	**87**	—
211	—	Somerset	**83**	**2**
286	—	Gloucestershire	**111**	—
8	—	Other Counties	—	—
500	26	,, Pasteurised	**428**	**31**
53	—	,, Sterilised	**48**	—
199	—	,, Schools	**232**	**15**
94	14	,, T.T. and Accredited	**186**	**35**
—	—	,, Special	**2**	—
398	75	Ice Cream : Hot Mix	**228**	**23**
43	6	Cold Mix	**24**	**4**
112	6	Plant Tests	**102**	**15**
249	74	Churn and Bottle Tests	**502**	**126**
—	—	Shellfish	**47**	**9**
—	—	Water	**94**	**9**
20	—	Cysticercus Bovis	**77**	—
441	—	Miscellaneous Samples	**216**	—

1952	Visits (Not sampling)	1953
617	Pharmacy and Poisons	432
438	Dairies	311
365	Milkshops	62
459	Ice Cream	559
	Ice Cream Manufacturers	65
686	Food Preparing Premises	246
	Butchers' Shops	393
537	Infectious Diseases (except food poisoning)	82
109	Dysentery	133
25	Noxious Weeds	28
54	Rag Flock	17
585	Other Visits	629
	Notices	
109	Informal Notices	61
98	Informal Notices Complied with	62
3	Statutory Notices	4
4	Statutory Notices Complied with	2
	Remedial Action	
4	Premises new built	—
18	Premises altered and repaired	7
26	Premises cleansed and decorated	49
50	Other defects remedied (Premises)	30
111	Hot water handwashing facilities provided	54
—	Heating provided	11
1	Drainage—Drains tested	1
5	Drains repaired	5
1	Choked drains cleared	1
8	Water closets—Flushing appliances provided	5
7	New pans provided	6
10	Other repairs	17
1	New plant installed	1
38	Other nuisances abated	28

CENSUS OF BRISTOL SHOPS SELLING CONSUMABLE GOODS

Greengrocer	515
Baker and Confectioner	511
Fishmonger (wet and fried)	230
Butcher	416
Cafe	269
Grocer	1,200
Dairies	53
Off-Licence	130
Off-Licence and Grocer	136
On-Licence	608
Wholesale (including Grocers, Confectioners, Meat Dealers, Fruiterers and Greengrocers)	88
Wholesale (Wine and Spirit Merchants)	5
Total	4,161

Note.—There are :—

Newsagents	385
Tobacconists	182

and it is estimated that approximately 90% of these sell confectionery.

Statistics

Samples submitted to the Public Analyst
1st January to 31st December, 1953

Sampled under the Food and Drugs Act :—	**1953**	1952
Dry goods, spirits and drugs	**2,229**	1,832
Milk	**515**	692
Total	**2,744**	2,542
Water, swimming baths	**109**	114
Water, others	**90**	80
Filling materials	**61**	33
Fertilisers and feeding stuffs	**68**	64
Poisons—*Part II*	**14**	4
Miscellaneous	**176**	115
Total	**518**	410
Grand total	**3,262**	2,934

Samples submitted to the Bacteriological Laboratory
1st January to 31st December, 1953

Milk :—	**1953**	1952
Tubercle examination	**281**	595
Tuberculin Tested	**159**	91
Accredited	**27**	3
Pasteurised	**428**	504
,, (schools)	**232**	199
Sterilised	**48**	53
Special	**2**	177
Ice Cream :—		
Hot Mix	**228**	398
Cold Mix	**24**	43
Water	**94**	99
Plant tests	**102**	112
Churn and bottle rinses	**502**	249
Shellfish	**47**	52
Miscellaneous	**216**	81
Cysticercus bovis	**77**	151
Total	**2,467**	2,807

Adverse reports were received from the bacteriological laboratory in respect of the following samples :—

Milk :—	**1953**	1952
Tuberculous	**2**	21
T.T. and Accredited	**35**	23
Pasteurised	**46**	26
Ice Cream—Grades 3 and 4	**27**	81
Plant tests	**15**	6
Churn and bottle rinses	**126**	74
Shellfish	**9**	*—
Water	**9**	26
Cysticercus bovis	**77**	151

*(Not counted as separate figure).

Appropriate action was taken in all of the above cases.

Action in respect of Samples Reported by the Public Analyst as " Not Genuine " during 1953

Description	No. of Samples	Reason Not Genuine	Action Taken
Milk ..	13	Deficient in Fat ..	Genuine when bulked.
Milk ..	3	Added Water and Deficient in Fat.	Milk Regulations Officer informed.
Milk ..	4	Added Water ..	Farmer fined £2.
Milk ..	2	Added Water ..	Farmer cautioned.
Milk ..	1	Added Water ..	Awaiting legal proceedings.
Ice Cream	2	Deficient in Fat ..	Letter to manufacturer.
Malt Vinegar	1	Non-Brewed Condiment.	Warning issued.
Malt Vinegar	1	Mixture of Non-Brewed Condiment and Vinegar.	Sample repeated and then decided insufficient evidence as to offence.
Malt Vinegar	1	Mixture of Vinegar and Non-Brewed Condiment.	Insufficient evidence as to offence.
Cream Cheese.	2	Deficient in Fat ..	Letter to M.O.H. in whose district supplier resides.
Pork Sausages.	1	Deficient in Meat ..	Reported to Ministry of Food.
Butter Scotch Creams.	1	Deficient in Butter Fat.	Letter to manufacturers.
Canned Soup	4	Containing Excess of tin.	Stock surrendered for destruction.
Lemon Juice	1	Deterioration of Ascorbic Acid.	Stock withdrawn.
Butter ..	1	Excess of Water ..	Repeat sample genuine.
Sal Volatile	1	Deficient in Ammonia and Ammonium Carbonate.	Repeat sample unobtainable.
Halibut Liver Oil & Calciferol.	1	Deficient in Vitamin A.	Repeat sample unobtainable.
Extract of Malt with Cod Liver Oil.	1	Deficient in Cod Liver Oil.	Letter to manufacturers.
Halibut Liver Oil Capsules.	1	Deficient in Vitamin A.	Repeat sample unobtainable.
Glucose Powder with Vitamin D.	1	Deficient in Calcium Phosphate.	Repeat sample satisfactory.
Ammoniated Tincture of Quinine.	2	Deficient in Ammonia.	Stock withdrawn.
Halibut Liver Oil Capsules.	2	Deficient in Vitamin A.	Stock exhausted.
TOTAL ..	47		

Ice Cream Grading 1953

Month	HOT MIX							COLD MIX						
	Total Samples	Grade				" Bristol Test "		Total Samples	Grade				" Bristol Test "	
		1	2	3	4	Sat.	Unsat.		1	2	3	4	Sat.	Unsat.
January	7	6	1	—	—	7	—	—	—	—	—	—	—	—
February	11	11	—	—	—	11	—	1	1	—	—	—	1	—
March (2 not graded)	16	12	2	—	—	16	—	—	—	—	—	—	—	—
April	31	21	8	1	1	27 (4 not tested)	—	2	1	1	—	—	2	—
May	30	26	2	2	—	29	1	3	2	—	1	—	3	—
June (14 not graded)	36	8	8	2	4	33	3	5 (1 not graded)	2	—	1	1	5	—
July (4 not graded) ..	23	12	4	1	2	20	3	3	—	2	—	1	2	1
August	19	11	5	1	2	19	—	2	2	—	—	—	2	—
September	31	24	3	3	1	29	2	4	3	1	—	—	4	—
October	7	6	1	—	—	6	1	2	2	—	—	—	2	—
November	8	8	—	—	—	8	—	2	2	—	—	—	2	—
December	9	3	3	3	—	8	1	—	—	—	—	—	—	—
Totals (20 not graded)	228	148	37	13	10	213 (4 not tested)	11	24 (1 not graded)	15	4	2	2	23	1
Percentages		71·1%	17·8%	6·3%	4·8%	95·1%	4·9%		65·2%	17·4%	8·7%	8·7%	95·8%	4·2%
TOTALS 1952 ..	392	193	124	34	41	366	26	42	25	11	3	3	37	5
Percentages		49·2%	31·6%	8·6%	10·4%	92·9%	7·1%		59·5%	26·1%	7·1%	7·1%	88·09%	11·9%

Dysentery, Typhoid, and Para-Typhoid Fever

Cases referred to the department for investigation during the year included 93 of dysentery, two of typhoid fever, and four of para-typhoid fever.

Clean Food Campaign

Progress in connection with the Clean Food Campaign was again stepped up during the year, and signs as to its effectiveness were shown by the increasing awareness of the public for the need of clean habits in handling food and a more critical attitude towards those who fail to observe proper precautions.

These trends show that public opinion is following more closely the lead of Health Committees and their officers who for years have striven for cleaner and safer handling of the nation's food supplies. Despite precautions, however, food-poisoning is still too prevalent and the Public Health Inspectors, by their work in the field, continued to perform an important service in enforcing reasonable standards of hygiene in food premises. A great deal of advice on hygiene standards and technique was given to managements and employees during the 4,233 visits of inspection made by the sanitary inspectors to all classes of food premises during the year.

Standards of Hygiene in Food Premises

The new Food and Drugs Act now in Bill form envisages additional powers for local authorities in the control of conditions in food premises, but punitive action will never replace persuasion in this matter and all health officers are convinced that education must play a major role in any real and lasting improvement, as it is clear that cleanliness is an attitude of mind.

The Chief Sanitary Inspector and his staff again gave many lectures to all classes of youth and adult organisations, and the records show that the 68 lectures on clean and safer food reached a total of some 1,300 people.

Special meetings were held with various food trade organisations including the " Clean Food " Committee of the Chamber of Commerce, and many ideas were discussed, including the establishment of—

A Food Hygiene Centre

The Chief Sanitary Inspector suggested that the provision of a centrally situated lecture-room for food-handlers would be a great step forward in this city. If accommodation of this kind were provided, with suitable facilities for sound-films and demonstrations, talks to groups of food traders formed into classes of 30 could be arranged, say, twice weekly. It is felt that this system of training should form a permanent and continuous part of public health work and that eventually all food-handlers would at least be trained in the precautions necessary and the reasons for their observance.

Consideration is still being given to the establishment of such a Food Hygiene Centre and to the varying needs of the food trades for convenient lecture facilities.

Food Inspection and Condemnation by District Inspectors

Apart from the 'specific' duties of food inspection carried out by the sanitary inspectors in the Food and Drugs section, it must be remembered that at all times other inspectors of the Chief Sanitary Inspector's department, including those at Avonmouth and the City Docks, are busily occupied, amongst their many other duties, in ensuring that the food which ultimately reaches the consumer is bacteriologically and chemically sound.

Inspection of meat, fish and of food in warehouses adjoining the City Docks, is dealt with separately, but when retail traders seek an opinion as to the soundness or otherwise of foodstuffs, this matter is in the main dealt with by the district sanitary inspectors. When food is surrendered it is disposed of as follows :—

Canned food is buried under supervision in controlled tips.
Other food is destroyed in the Corporation's incinerators.

In the case of food unfit for human, but fit for animal consumption, small consignments are usually used in the preparation of pig food, while in the case of large consignments, the department notifies the Animal Foodstuffs Division of the Ministry of Food, who arrange for their disposal.

It is known, of course, that the Food and Drugs Act 1938 authorises the inspector to seize food which he has reason to consider unfit for human consumption, and lay it before a Justice of the Peace, who, if he is convinced of its unsoundness, may make an order condemning it and order its destruction. This course rarely needs to be pursued, and the co-operation of the food trade in this matter, together with the unceasing vigilance of the inspectorate, is to some extent the reason for the confidence of the general public in the nation's food.

During the year, apart from carcase meat, some 60 tons of food were condemned in this way, this figure including 46,284 tins of food. The district sanitary inspectors themselves made 667 visits in connection with food inspection.

Fish Inspection—Visit to Grimsby

A great deal of attention is paid in the city to the wholesomeness of fish supplies and early-morning visits of inspection are made every day to the fish market and other wholesale fish supply premises.

The relationship and understanding with the fish trade, both wholesale and retail, is excellent and no real difficulties are encountered over any parcels of fish which may have to be dealt with. As with other aspects of health inspection, a fair assessment of the position can better be arrived at when there is a proper appreciation of difficulties associated with the trade, and it was for this reason the Health Committee approved the Chief Sanitary Inspector's recommendation that the food inspector mainly concerned with fish inspection duties should have an opportunity of attending an organised tour of the Grimsby Docks to see all the processes to which fish are subjected at a modern port. This included the unloading of catches, auctioning of fish and inspection of fish-processing and quick-freezing facilities.

This visit proved to be useful and on his return the inspector reported to the Sanitary Sub-Committee and the Chief Sanitary Inspector reviewed the fish inspection service and fish hygiene generally. From the report submitted, it was clear that a considerable effort is being made to improve the distribution of fish supplies in the city.

Basement Bakehouses

Under the Factories Act, 1937, the local authority has specific duties in relation to the control of basement bakehouses, including the quinquennial inspection of such bakehouses in order that certificates of suitability may be renewed or rescinded as considered appropriate.

A basement bakehouse is defined as : "a bakehouse, any baking room of which is so situate that the surface of the floor is more than three feet below the surface of the footway of the adjoining street, or of the ground adjoining or nearest to the room ".

Premises of this character are regularly inspected, but the Act lays down that at the expiration of every five-year period the suitability of the premises as a basement bakehouse shall come up for review. Any basement bakehouse which has not been used as a bakehouse for a period exceeding twelve months cannot again be considered for use in its former capacity.

The current year ended a five-year period and accordingly a detailed inspection of the remaining basement bakehouses was made ; each was subsequently considered by a viewing sub-committee of the Health Committee. The number of premises of this type is decreasing, as will be seen from the fact that in 1943 there were 10 on the register, in 1948 there were seven, and in 1953 there were only five. One further basement bakehouse will disappear under the central planning schemes during 1954.

Hygiene of Licensed Premises

From time to time the Ministry of Health has drawn the attention of local authorities to the need for adequate inspections of licensed premises to ensure that hygienic conditions as required by the Health and Food laws are provided and maintained.

During recent years a great deal of work has been done in this respect by the department, in collaboration with the Police, and the local authority has secured considerable improvements in the standard of sanitation and hygiene of these premises. This important matter has been discussed with the managements of the larger brewery companies and a planned programme of improvement or reconstruction has been drawn up. Further details of the work accomplished will be given in the next Annual Report.

It is of interest to note that the Chief Sanitary Inspector's staff once again took part in the Licensed House Training Courses given to those connected with this trade. It is clear that a better understanding of responsibilities under the Food and Drugs Act and various hygiene requirements will have been disseminated as a result.

CITY WATER SUPPLY

Particulars required by Ministry of Health Circular

1. Whether the water supply of the area and its several parts has been satisfactory :— (a) in quality ; (b) in quantity.	YES.
2. Where there is a piped supply, whether bacteriological examinations were made of the raw water and, where treatment is installed, of the water going into supply ; if so, how many and the results obtained ; the results of any chemical analysis.	Raw waters examined bacteriologically before treatment by Bristol Waterworks Company. Raw water at Barrow before filtration—weekly. Raw water at Chelvey before chlorination—twice weekly—when pumping. Raw water at Litton before chlorination—weekly. After treatment found satisfactory.
3. Where the waters are liable to have plumbo-solvent action, the facts as to contamination by lead, including precautions taken, and number and results of analysis.	NOT LIABLE. Water is not liable to lead contamination and this is confirmed by weekly analysis of all city supplies.
4. Action in respect of any form of contamination.	On finding any trace of faecal contamination the matter is taken up with the appropriate authority immediately when further samples are taken until satisfactory results are obtained. Contamination after treatment has been Negligible.
5. Particulars of the proportion of dwelling-houses and the proportion supplied from public water mains:— (a) direct to houses ; (b) by means of standpipes.	(a) the whole of the population in the Bristol Area is supplied by public water mains direct to houses with the exception of a few isolated premises in the rural suburbs when the supply is free from private wells and subject to a form of chlorination. These are gradually being reduced as mains supply is laid on. (b) Negligible.

(v) ATMOSPHERIC POLLUTION, NOISE NUISANCES AND OTHER MATTERS

The Cleaner Air Campaign

Apart from their statutory responsibilities under the Public Health Act, the Bristol Health Committee has for many years taken a very special interest in the problems of atmospheric pollution. Every encouragement has been given to the Chief Sanitary Inspector and other officers in connection with recommendations made by the National Smoke Abatement Society and other bodies in an effort to deal with this important matter on a planned and more scientific basis.

During the year, 408 visits and observations were made by the district sanitary inspectors in their work to keep down the level of pollution from various industrial sources. This amount of attention is a considerable increase on that given to the matter in former years and in due course the advice given on firing methods and equipment should be reflected in a cleaner atmosphere.

It is realised to-day that any real step forward must focus attention on ‘ prevention ’ rather than abatement and it is clear that the Health Committee's wise support for improvement in atmospheric conditions has been more than justified by the quickening of public interest in this matter which followed the disastrous London smog of December 1952.

During July 1953 the Government announced the appointment of an Air Pollution Committee of Inquiry under the Chairmanship of Sir Hugh Beaver and it is of interest to note that three members of the National Smoke Abatement Society's Executive Council have been appointed to the Committee. This Committee on air pollution published an Interim Report outlining the problems with recommendations for immediate action.

It is obvious that any solution must be based on long- and short-term measures. Everyone connected with public health is aware of the fact that occasional enthusiasms are of little avail and this is underlined in the final sentence of the Interim Report which, after proposing a detailed study of the practical difficulties continues as follows :—“ we feel bound to point out that such work will be merely of academic interest and can lead to no material improvement unless there is general acceptance of the fact that the cure will require heavy expenditure and full co-operation of all persons and all interests ”.

The Annual Conference of the National Smoke Abatement Society took place at Glasgow. The Bristol Health Committee was represented by the Chief Sanitary Inspector, who was again appointed Deputy-Chairman of this organisation which is now receiving a great deal of increased support from local authorities throughout the country.

Symposium on Atmospheric Pollution

The Bristol and District Regional Smoke Abatement Council held a successful one-day conference during October at the University of Bristol.

Invitations were extended to local authorities and their officers, industrial concerns, and diverse organisations and interested persons. More than 400 delegates attended, and during the morning session this useful cross-section of people heard addresses from Professor R. H. Parry, Medical Officer of Health ; Mr. J. Nelson Meredith, City Architect, and Mr. J. B. Patterson of the National Agricultural Advisory Services, who collectively dealt with the ill effects of atmospheric pollution on health, buildings and vegetation.

During the afternoon session, Mrs. D. M. Charlton, Women's Advisory Council on Solid Fuel, and Dr. A. Parker, Director of the Fuel Research Station at Greenwich, discussed practical methods of reducing domestic and industrial smoke. Dr. J. Bronowski, the chairman, gave an excellent summary, and made many suggestions on practical methods to deal with this problem.

Lively and instructive discussions took place at both sessions of the conference, which was well reported in the provincial press, and by some of the participants on the B.B.C. West Regional programme. Altogether, it was considered that this further effort to underline the importance of clean air was worthwhile.

Ventilation of Public Service Vehicles

A complaint, in general terms, was received regarding inadequate ventilation of public transport, and the point was made that air in passenger-carrying vehicles was so infrequently changed that conditions could develop which would be a menace to health.

This matter was considered by the Health Committee and the Chief Sanitary Inspector discussed the matter with the Transport Manager of one of the largest passenger vehicle works in the country, from which it is evident that a great deal of thought is being given to this difficult problem.

Nuisance from Offensive Fumes

Complaints of offensive fumes emitted from various industrial processes received attention during the year and progress was made in connection with the installation of equipment to secure abatement of nuisance.

The modernisation programme at the Stapleton Road Gas Works proceeded towards the establishment and use of a new and extended gas-producing plant and by the time another Annual Report is due, this work will have been largely accomplished.

The fumes emitted from a carbon-black factory in the Avonmouth area were abated by the installation of special equipment to burn the offending fumes and no complaints have since been received.

Fume emissions from a tin-printing factory were the subject of treatment by special experiments and, as the year ended, consideration was being given to the installation of a completely new principle for dealing with this class of nuisance.

In one case of fumes from a special industry registered under the Alkali Works, etc., Act, the matter was discussed with the District Inspector of the Ministry of Housing and Local Government and a report was received on the measures being undertaken to secure improvement.

Smoke and Grit from Railway Engines

Residents in certain parts of the city drew attention to what appeared to be excessive emission of smoke and grit from railway engines and asked that the matter be investigated with a view to improvement. The problem of nuisance from railway engines is not easy of solution, but legislation requires that " every locomotive steam engine used on the railways shall, if it use coal or other similar fuel emitting smoke, be constructed so as to consume its own smoke ". The procedure to secure abatement is somewhat involved and prior to any other action, arrangements were made for the District Sanitary Inspectors to make a survey of conditions in the city area so that, if necessary, the matter could be pursued with the appropriate authorities. Details of the survey and any action found to be necessary will be given in the next Annual Report.

Nuisance from Oil Fumes

The widespread and increasing use of oil fuel in connection with industrial and domestic heating plant occasionally gives rise to complaints of fume emission. Such equipment can be operated without nuisance and in most cases the products of combustion are discharged at a comparatively high level. This is not the case, however, with the low-level fumes emitted by oil-powered road vehicles, and during recent months there has been a quickening of public interest in this question. Complaints have been received about the effect of fumes in the city streets.

This problem was referred to as long ago as 1933 by Sir William de Courcy Wheeler, in an address to the Medical Sociology Section of the British Medical Association in Dublin when he declared that :—

> " The permeation of the atmosphere with gases from motor vehicles was accountable for an unestimable annual rise in the death rate and that in the great cities the pedestrians and motorists alike are exposed to a veritable gas attack which, if intensified, will require the wearing of gas masks in self-defence." According to Sir William, " the blood of traffic policemen has been found to be charged with carbon monoxide at a high concentration . . . Smoke from factories is far less toxic than the fumes from motors. The damage to health has not been scientifically assessed, nor has it been considered by the authorities with sufficient care ".

This may or may not be an exaggeration, but it is certainly a fact that excessive fumes from motor vehicles cause sufficient discomfort to require the adoption of remedial measures.

The Road Traffic Act, 1930, Section 30, empowers the Minister of Transport to make regulations generally as to the construction and equipment of motor vehicles and in particular as to the consumption of smoke and emission of visible vapour, sparks, ashes and grit.

These Regulations have been made recently and are known as the Motor Vehicles (Construction and Use) Regulations, 1951, and the following clauses are of special interest :—

> *Clause* 21. *Emission of Smoke or Vapour*
>
> Every motor vehicle shall be so constructed that no avoidable smoke or visible vapour is emitted therefrom.
>
> *Clause* 78. *Maintenance of vehicle so as not to emit smoke, etc.*
>
> Every motor vehicle shall be maintained in such condition and shall be so driven and used on a road, that there shall not be emitted therefrom any smoke, visible vapour, grit, sparks, ashes, cinders, or oily substance, the emission of which could be prevented or avoided by the taking of any reasonable steps or the exercise of reasonable care, or the emission of which might cause damage to other persons or property or endanger the safety of any other users of the road in consequence of any harmful content therein.
>
> *Clause* 101—*Penalty*
>
> If any person uses or causes or permits to be used on any road a motor vehicle or trailer in contravention of or fails to comply with any of the preceding Regulations contained in Part III of these Regulations, he shall for each offence be liable to a fine not exceeding twenty pounds.

The effect on public health of oil fumes emitted into the city streets was discussed by the Health Committee when it was explained that the above powers have been delegated by the City Council to the Watch Committee and it is clear that in view of the tendency to adopt oil-fuelled engines for road vehicles more extensively, this matter assumes greater importance.

Noise Nuisance

During the post-war years, the number of complaints received from residents regarding noise created by industrial processes has increased. It is now recognised that excessive or unreasonable noise is of public-health concern and the Bristol Corporation have powers, under a local Act, to deal with noise as a statutory nuisance under the Public Health Act, 1936. These powers, however, are limited and are by no means an answer to unavoidably noisy industrial processes which are situated close to residential properties.

The main complaint in such circumstances was usually that operations were carried on throughout the night hours and disturbed the sleep of people in nearby properties. The installation of less-noisy machinery and sound-proofing eased the position, but in some instances all that was necessary was greater care on the part of employees in regard to shouting, banging of doors, and so on, and a measure of improvement resulted in all cases dealt with by the department.

A petition was received from a large number of residents complaining of noise from jet aircraft based outside the city boundary. The disturbance caused by these machines was so great that it interfered with school lessons, church services, patients in hospitals, institutions and so on; in fact the sudden screech of jet engines was considered intolerable by the majority of people in the area.

Representations made by the Health Committee against jet operations over the city were successful, and comparative quiet was restored. The other complaints dealt with included noise created by a tyre-remoulding factory, a firing range and a board mills.

Dust Nuisance

Petitions were received in relation to dust nuisance arising from operations carried out at a corn merchant's premises and the use of a large unpaved area as a car and lorry park. Improvements were quickly effected at the corn merchant's premises, but the dust given off from the lorry park operated by the Road Haulage Executive proved to be a more difficult problem because replanning of the area was proceeding; arrangements were made for the surface to be consolidated and sealed with a suitable compound.

Offensive Trades

The establishment and operation of premises connected with offensive trade processes is essential to the life of a large industrial city. Well-planned buildings and modern equipment are, however, necessary if nuisance from these sources is to be avoided and for that reason it is not surprising that odour nuisance is occasionally emitted from the premises at present in use.

The long-term planning necessary to achieve more suitable siting of offensive trade premises in Bristol was given further consideration during the year. Meanwhile every effort was made to prevent cause for complaint by the various trade managements in co-operation with the Health Department.

Public Health Inspection of Factories

In a previous Annual Report an account was given of the work of factory inspection and some difficulties met with in practice were set out. While the extent of factory supervision by local authorities depends largely on whether particular factories are mechanical or non-mechanical; nevertheless, the improvement of sanitary conditions in factories does involve a fair proportion of the district inspector's time. During the year 776 visits to factories were made, but, in addition to routine inspections, visits are made as the result of information passed to the Public Health Department by H.M. Inspectors of Factories. Such information, which invariably concerns unsatisfactory sanitary conditions within a factory, is promptly investigated and the Factory Inspectorate is notified of the action that has been taken.

It is important to note, however, that local authorities' duties in relation to factories are not confined to legislation contained in the Factories Acts. The Public Health Acts give additional powers to local authorities, as is instanced by the fact that nuisances which arise from manufacturing processes can be abated by action under the Public Health Act, 1936. This power relates to all types of factories, trades and works premises and to conditions within or without such places. Power is given under the same Act to reject plans of new factories where inadequate sanitary accommodation is indicated. Again the use of workrooms over certain undesirable stuctures, for example, cesspools, ash-pits and so on, is prevented, and control of the spread of infectious disease is brought about by careful attention to outworkers. The sanitary conditions of workplaces, that is, places within the confines of a factory which do not constitute part of the factory, are controlled by the Health Department under the provisions of the Public Health Act, 1936.

It will be seen that whilst Public Health Inspectors play a part in ensuring a healthy working environment for persons employed in a factory, the department's spheres of activity also extend to the possible health dangers which may emanate from a factory and affect the general public. Indications of the necessary control can be seen under noise, smoke and fume nuisances dealt with in this report.

Sports Grounds—Sanitary Accommodation

The problem of sanitary accommodation at various sports grounds within the city area again received attention during the year and a number of improvements was effected.

In my last annual report special mention was made of conditions at the Bristol Rovers' Ground, Eastville, and it is pleasing to record that work was commenced on an excellent scheme for the provision of adequate sanitary accommodation for both sexes at this frequently used and well attended sports arena.

Pet Animals Act, 1951

Since this Act came into force on 1st April, 1952, 28 shops have been licensed by the Health Committee. In every case the premises have been visited and reported upon by the sanitary inspectors so as to ensure that conditions for the accommodation and general welfare of animals are observed.

During 1953, 29 applications for licences were received and were dealt with as follows :—

Licences renewed	17
New Licences issued ..	9
Businesses discontinued ..	2
Application withdrawn ..	1
Total ..	29

At the end of the year 26 licences were still in force.

Danger from Cement

An unusual complaint was received by the Medical Officer of Health to the effect that workmen using cement on a certain site were complaining of nose-bleeding and intestinal disorders which, it was alleged, were attributable to gas given off by the cement when being mixed.

Laboratory tests revealed that this particular cement—a German product—was very much finer in texture than English cement and, when mixed with water, created an odour similar to acetylene gas. It is generally understood that pure acetylene is odourless and the odour commonly associated with this gas is due to the presence of phosphine gas present as an impurity. It was assumed that a similar condition might exist in connection with the cement and tests were therefore made to determine the presence of phosphine, and its presence was demonstrated in a concentration of not less than six parts per million. Cement, which is normally composed of lime and silica, often contains traces of various impurities. If one of these impurities happened to be a phosphate, the calcining process might produce calcium phosphide and this, when in contact with water, would produce phosphine gas and this gas would undoubtedly cause the symptoms of which complaint was made.

In addition to the direct effect of the gas itself, there was every possibility that as this cement was very fine, particles would float much more readily than would be the case when using English cement and these particles, when breathed in by the workers, would impinge upon the mucous membranes of the nostrils and throat and set up a direct focus of trouble.

In this particular case, there was no further action which the department could take because the batch of cement in question had been used, but the information is of interest and was sent to the importers and other interested bodies.

A " Pleasant " Rural Stream

On the southern side of the city is a stream which runs for some four or five miles through what has within recent years become a built-up area, whereas previously it was almost entirely rural in character. Complaints were made that the stream was becoming sluggish, due to the deposit therein of garden refuse, and during hot weather, when the level of the water dropped, this rubbish decomposed and gave off obnoxious odours.

The City Engineer was asked if he would undertake the cleansing of the stream because it was felt that although a legal responsibility might rest upon those persons whose gardens abutted the banks of the stream, it would be impracticable to hold perhaps hundreds of people jointly responsible for the maintenance of the stream in a clean condition. Letters were, however, sent to all such persons, pointing out their responsibilities and calling upon them to do all in their power, not only to avoid depositing rubbish themselves, but to stop any other persons whom they might see polluting the stream in this way.

It was then discovered that the stream, although clear of rubbish, was showing signs of other forms of pollution. Careful inspection and tests, which necessarily took some considerable time to carry out, revealed various sources of contamination. One source was the discharge of foul matters into the stream by storm-water sewers to which soil drainage had been incorrectly connected. These connections were eventually traced and the necessary revision of connections was made so that the foul drains discharged into the foul sewer. Another source of contamination was traced to a local paint works where it was found that the water used for washing returned paint containers was being passed through settlement and filter tanks before being discharged into a storm-water culvert. Theoretically, this was a reasonable arrangement, but when the firm introduced plastic emulsion paints, it was found these paints remained in such fine suspension that they passed through the settlement and filter processes and contaminated the stream. Here again, a necessary rearrangement was made to pass this trade effluent into the foul sewer.

Even after these improvements had been effected, the stream was kept under constant observation and several other sources of pollution were located, such as houses draining into the stream, and a cesspit overflow causing serious contamination. Each of these in its turn was dealt with until the nuisance was removed. The City Engineer then undertook a considerable programme of clearing and lowering the stream in order to improve the flow and a detailed survey of the banks was carried out to deal with any rodent infestation.

This particular case reveals difficulties that can arise when a rural area adjoining a fast-growing city becomes a residential area.

The " Not-so-Ornamental " Pond

A rather unusual situation was dealt with during the year when two messages were received, almost at the same time, to the effect that unpleasant odours had been noticed in a certain residential district. An immediate investigation, whilst failing to establish any obvious explanation for the odours, revealed that a street gully was somewhat offensive and arrangements were made for its immediate cleansing. Later in the day, information was received from the Public Analyst to the effect that the wife of a resident in the area had called with a sample of water taken from a stream in her garden, and in his opinion this contained a high concentration of sewage. With this clue now available, investigations were switched to the house in question, where it was found that an ornamental stream flowing through the grounds normally having a depth of approximately two inches of water, now had a depth of six inches of what appeared to be crude sewage. This stream was fed from a large pond in the grounds of the adjacent house. This pond was found to be overflowing with sewage and, as it was fed by a storm-water culvert, the district inspector assumed the foul sewer had become choked and was in some way overflowing into the storm-water culvert.

Immediate investigation of the manholes in the district revealed that this was in fact true. The chokage was removed and the foul sewers returned to their normal function.

This, however, still left a large pond of sewage in the garden of the private house which was slowly flowing via the ornamental stream through a residential area. Pumping was immediately started and 14,000 gallons of sewage were removed. The Chlorination Officer then carried out thorough chlorination of the pond and the whole of the contaminated area.

The first complaints were received during the morning and the whole of the operation was completed by 11 o'clock that night. The next morning the stream was flushed from a nearby fire hydrant and further chlorination was carried out. Fortunately, that night very heavy rain fell and completed the cleansing process.

The Registration of Aged Persons' Homes

During the past year the department was again concerned in the registration of Homes for the Aged.

This type of premises differs from the private nursing home in that direct medical supervision and resident nursing services are not required. It is intended that the inmates shall enjoy a normal life in the community of the Home, visited, if and when necessary, by their own general practitioner, and under his medical direction.

Private Nursing Homes have been common for many years, but, although not unknown previously, Homes for the Aged have rapidly increased in number during the last ten years. This increase resulted in the obligation to register such premises imposed by the National Assistance Act, 1948. The care of elderly people in this city and, in fact, throughout the country, is a serious responsibility and may well become a considerable public-health problem of the future.

Such Homes, if properly conducted, can assist the local authority in providing comfortable living conditions for certain aged and infirm persons.

The registration of the Homes calls for the closest co-operation between several departments of the Corporation. To ensure a satisfactory standard, it is usual for the premises to receive consideration by the Personal Health and Environmental Health Sections of the Health Department ; the Welfare Services Department ; the City Engineer's Department, and the Fire Officer's Department.

The Chief Sanitary Inspector reports upon the suitability of the Home as to its situation, construction, state of repair, the accommodation for inmates and staff and the equipment provided. Inspections by district inspectors are quite detailed and attention is given, *inter alia*, to such matters as the ventilation, heating and lighting of wards and the premises as a whole ; food storage and kitchen accommodation ; bathing and sanitary conveniences ; the safety of staircases and passages ; and the disposal of soiled linen and household refuse.

It has been found that registration enables the local authority to ensure that such Homes in the city provide pleasant wards where patients are not overcrowded, with well equipped and conducted kitchens and a good sanitary standard throughout.

Refresher Course for Sanitary Inspectors

The success of the Refresher Courses for Sanitary Inspectors organised by the University of Bristol, Department of Preventive Medicine, was repeated during the year under review.

Public Health Inspectors are the first to agree that demonstrations and discussions on new scientific methods and legislation is ever necessary in the general interest and efficiency of the health services.

The 1953 course was held on 27th, 28th and 29th March ; lectures given included the following subjects :—

The Sanitary Inspector and Problem Families.
Bacteriological facilities as an aid to meat inspection.
Food hygiene with special reference to mobile canteens.
Survey and clearance of unfit houses.
Redevelopment areas and declaratory orders.

Arrangements were made for various practical demonstrations in connection with the subjects dealt with and the course concluded with an open forum discussion from which it became clear that the time given by those attending during the week-end had proved to be of real value, and thanks were expressed to the Health Committee and the University for the excellent facilities provided.

(vi) RAT DESTRUCTION, DISINFECTION AND DISINFESTATION

Rodent Control

The important work of rodent control again received the energetic attention of the department and the Rat (Repression) Officer and his team of operators carried out very effective work in disinfesting all classes of property. Responsibility for keeping premises free from rat infestation rests with the occupier and it can be fairly said, all now realise that measures necessary to deal with these destructive and disease-bearing pests must be continuous in all areas of the city.

The following detailed information of the work carried out has been provided by the Rat (Repression) Officer.

The total number of complaints received during 1953 was as follows:—Rats, 1,767; mice, 810, making a total of 2,577. The number of complaints brought forward from the previous year as incompletely dealt with was 182, making the total number of complaints dealt with 2,759.

Under Part I, Clause 3, of the Prevention of Damage by Pests Act, 1949, 2,307 occupiers notified this department that rats or mice infested their premises, and appropriate action was taken.

Verbal notices were served on occupiers or owners of 270 premises, drawing attention to their obligations under the above Act and in all cases these notices were complied with.

The demolition and clearance of vacant sites was closely watched, but no serious movement or evidence of rats could be found.

The Corporation refuse tips, destructor works, river banks, parks and open spaces were regularly surveyed, and infestations where found, were brought under control.

Nurseries, schools, clinics, etc., made many calls on the department's services during the year and 735 treatments were carried out, chiefly against mice infestation.

The clerk investigators visited 46,460 premises during the period under review, this total comprising :—

Dwelling houses ..	42,481
Business premises ..	3,362
Local authority ..	617

The number of separate infestations revealed by these visits was as follows :—Rats, 96 ; mice, 1,509. Included in this total were 541 business premises dealing with the sale or manufacture of foodstuffs, and of this number, 10 rat and 159 mice infestations were discovered and dealt with. The appropriate charge for this work was made in all cases.

Inspections numbering 833 were made to premises where fowls are kept, and advice was given on the better siting and proper rat-proofing of the fowl-house.

In one section of the offensive trades area in St. Philip's Marsh, a medium infestation of common-rat was found, but this in a short period responded well to treatment.

A quota of rats from various parts of the city have been regularly submitted to the Department of Preventive Medicine for examination for plague and other diseases. The results of these examinations for 1953 have all been negative.

Rat Repression—Summary of Work Done During 1953

1952					1953			
Business Houses	Houses	Other	Total		Business Houses	Houses	Other	Total
111	85	46	242	Complaints incompletely dealt with brought forward	88	73	21	182
889	1,381	293	2,563	Complaints received . .	870	1,430	277	2,577
1,000	1,466	339	2,805		958	1,503	298	2,759
				Remedial action :—				
				Infestation cleared :—				
885	1,200	317	2,402	By Corporation . .	901	1,280	280	2,461
2	41	—	43	By Occupiers . .	10	39	—	49
25	152	1	178	No action required	15	138	7	160
88	73	21	182	Incompletion at end of year carried forward . .	32	46	11	89
1,000	1,466	339	2,805		958	1,503	298	2,759

Rat Repression—Summary of Work Done During 1953

1952					1953			
Avonmouth	Bristol	Portishead	Total		Avonmouth	Bristol	Portishead	Total
				Rats recovered :—				
				Docks, quays, wharves, etc. :—				
362	—	15	377	Brown	63	—	8	71
171	4	—	175	Black	89	13	—	102
—	—	—	—	Species not recorded	—	—	—	—
96	—	—	96	Examined for plague	45	—	—	45
63	—	1	64	Mice	26	19	. . 1	46
				City :—				
			309	Brown				110
			194	Black				99
			—	Species not recorded . .				—
			75	Examined for plague . .				31
			126	Mice				73

Rat Repression

No. of Complaints of Rats or Mice.		Dealt with by Corporation.	Dealt with by Occupier.	No action required.	Out-standing.
Out-standing. 1952	Re-ceived. **1953**				
182	**2,577**	2,461	49	160	89

Type of Infestation complained of.		Bodies recovered from Premises.		
Rats	Mice	Black Rat	Brown Rat	Mice
1,767	810	99	110	73

Dock area :—

Bodies Recovered :—	Rattus rattus (black)	Rattus norvegicus (brown)	Mice
	102	71	27

The two half-yearly treatments of the city sewers were carried out under the Ministry of Agriculture and Fisheries scheme, and the assistance of the Ministry's Chief Technical Officer, combined with the enthusiasm of the City Engineer's men engaged on this work, ensured the smooth working and successful application of both treatments.

Early in the year a number of improved concrete baiting-points, designed by the Rat Officer, placed in one section of the sewer system gave remarkable results.

The result of the full year sewer treatment was as follows :—

Number of manholes baited	4,921
Number of manholes showing pre-bait takes ..	3,094
Number of manholes showing poison takes ..	2,673

In 91 cases defective drains which were referred to the Chief Sanitary Inspector for investigating and testing were found to be badly rat infested.

The rodenticide " Warfarin " has continued to show excellent results, and large areas of the city have been completely cleared of rats by the application of this modern and scientific treatment.

Many business premises which were previously receiving assistance for rodent control, and now cleared of rats and mice, have made no call on the department during the past year. Others have had men trained by the department and are themselves using " Warfarin " with very good results.

The transit and store sheds, throughout the dock area, continued in an excellent condition and great satisfaction has been expressed by the General Manager's staff.

The managements of private business premises throughout the dock areas are generally aware of the need for vigilance and rodent control ; this results in close co-operation with the department.

There was an increase in the number of wasps' nests dealt with during this year :—1953, 133 (1952, 72) ; in addition, 62 occupiers were given advice on how to deal with others found to be more easily accessible.

Pest Control Technology Course

The Chief Sanitary Inspector reported to the Health Committee on improvements in the control of pests throughout the city and stated that a course, organised by the City and Guilds of London Institute, was being arranged in Bristol for students wishing to study modern methods of pest-control.

A number of the Rat Operators desired to take the two-year course through evening studies, and the Health Committee agreed to assist these employees with the cost of fees and text-books.

Disinfection and Disinfestation

The Disinfecting Station at Feeder Road continued its useful public service by dealing with the disinfection of premises, bedding, clothing and other articles. The disinfestation of premises, bedding, clothing and persons infested with vermin is still necessary ; in addition to this duty, the staff gave valuable help in collecting for destruction small parcels of foodstuffs condemned by the sanitary inspectors as unfit for human consumption, and also assisted in the testing of drains and similar work.

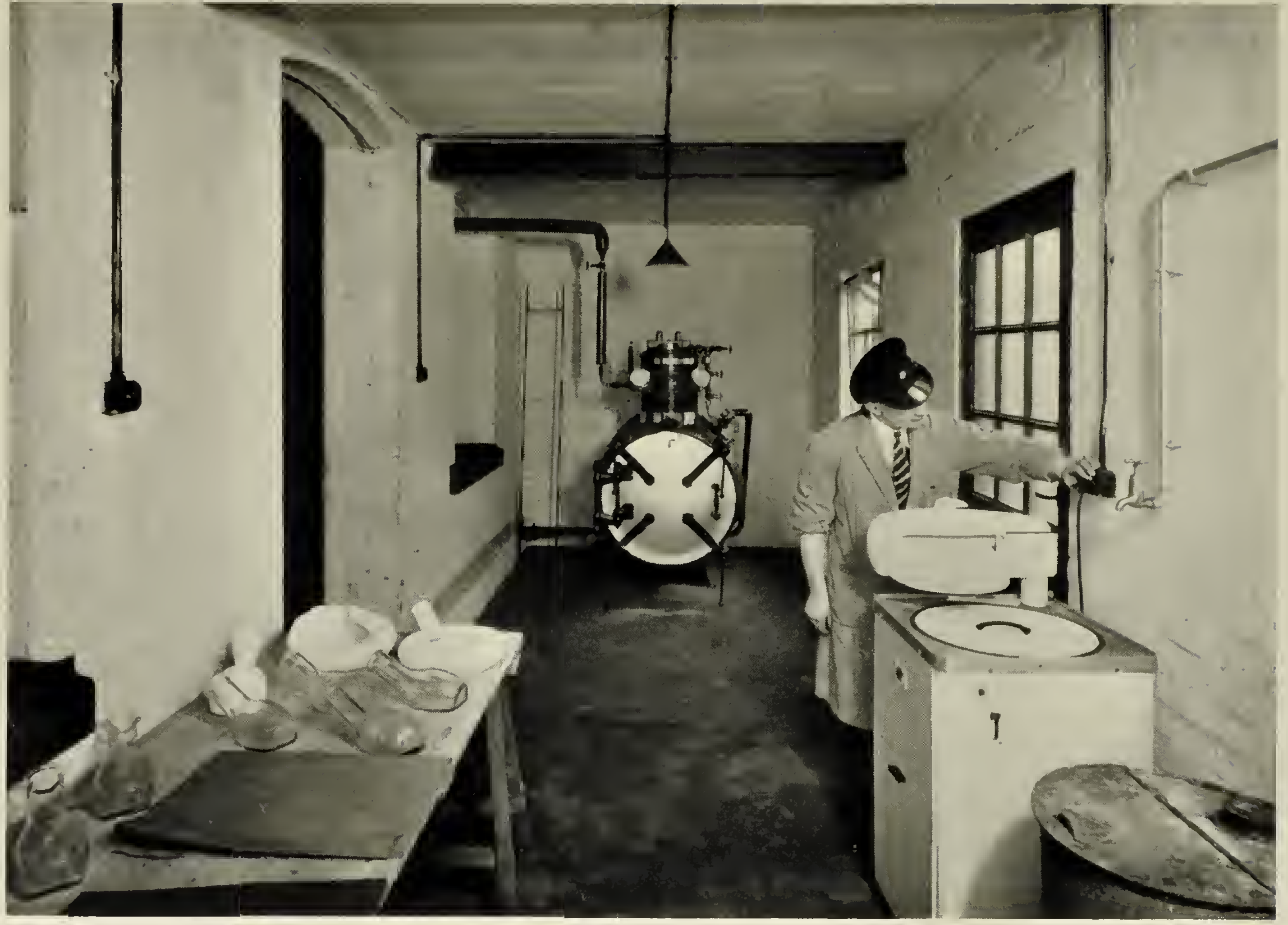
Disinfections, Drain Tests, Etc.

1952		1953
3,165	Premises disinfected	**3,021**
71,953	Articles disinfected	**62,567**
10,369	Articles disinfested	**9,772**
3,743	Articles destroyed	**2,999**
364	Vermin repression—by spraying	**356**
306	Vermin baths—Men	**200**
2	Women	—
312	Disinfections for Hospitals and Nursing Homes . .	**298**
537	Public Library books collected and disinfected . .	**452**
32	Private Library books collected and disinfected . .	**36**
79,824	Foodstuffs, etc., destroyed—Canned food . .	**71,636**
9,288 lbs.	Other foodstuffs . .	**10,638** lbs.
1,130	Food Premises visited	**1,034**
50	Drain Tests	**58**
714	Other work	**766**

Certain local authorities adjoining the city received assistance in connection with their disinfection and disinfestation problems on 145 occasions during the year and other miscellaneous matters which might be mentioned are as follows :—

Some 2,000 articles, mattresses, blankets, etc., were disinfected for the Ministry of Works ;
Over 7,000 pairs of gym shoes, and
1,388 pairs of gym shorts were disinfected for the Education Department ;
6,589 poultry-meal bags were disinfected to prevent spread of fowl pest ; and
2½ tons of rags were so treated for a private firm who intended to sell this material for the use of engineers.

Flame-guns were used by the staff for the destruction of 129 pig carcases affected with swine fever.



Extension of Disinfecting Facilities Equipment used in connection with the National Health Service

The experiment of using coke as a smokeless boiler fuel for steam-production, used in the disinfecting machines, was successful and this fuel will now be adopted permanently.

The Washington Lyons disinfecting machines at the station have been in use for very many years, but the extensive repairs carried out should ensure a new lease of life for these heavily used machines.

The extension built at the station to accommodate an additional Washington Lyons Steam Disinfector, in connection with the sterilisation of nursing-service articles under the National Health Scheme, was brought into full use during the year and, in addition, in some special cases soiled linen from the homes of elderly people was collected, washed and returned. The electric washing-machine and other equipment used for this development of health service can be seen in the photograph printed with this report.

Crickets

In my report for 1952, reference was made to a heavy infestation of crickets which made a sudden appearance in the Bedminster Down area and called for urgent and widespread treatment. On Friday afternoon, the 26th June, 1953, numerous telephone messages were received to the effect that a plague of crickets had appeared in houses adjoining a tip at Argyle road and Charlton Road, Kingswood. The houses involved had been recently constructed by private builders and some in fact were still not completed.

The Deputy Chief Inspector, accompanied by staff from the Disinfecting Station, visited the site, and spraying was immediately commenced. The houses facing the tip were sprayed both inside and out and a belt of Gammexane powder was laid across the front gardens to form a barrier to the crickets. In addition, the roadway separating the tip from the houses was sprayed with liquid Gammexane.

The operations were continued the following morning and altogether 6½ gallons of Gammexane, 90 gallons of Tip Dressing and 40¼ pounds of Gammexane powder were used. Those responsible for the control of this tip were informed of the infestation and arrangements were made for the normal preventive treatment to be supplemented by spraying 3,000 gallons of creosote over the tip surface whilst a further 2,400 gallons of Tip Dressing were used to treat the surrounding undergrowth and areas where crickets were likely to harbour or breed. These co-operative measures proved effective and the main infestation was eliminated in a period of three days.

(vii) FACTORIES ACTS, 1937 and 1948

1.—Inspection of Factories

Premises (1)	Number on Register (3)	Number of		
		Inspections (4)	Written Notices (5)	Occupiers prosecuted (6)
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	218	107	8	—
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	1,049	669	27	—
(iii) Other Premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises) ..	93	—	—	—
TOTAL ..	1,360	776	35	—

2.—Cases in which Defects were Found

Particulars (1)	No. of cases in which defects were found				No. of cases in which prosecutions were instituted (7)
	Found (3)	Remedied (4)	To H.M. Inspector (5)	By H.M. Inspector (6)	
Want of cleanliness (S.1) ..	8	13	—	11	—
Overcrowding (S.2)	—	—	—	—	—
Unreasonable temperature (S.3)	—	—	—	1	—
Inadequate ventilation (S.4) ..	—	—	—	2	—
Ineffective drainage of floors (S.6)	—	—	—	—	—
Sanitary Conveniences (S.7) :					
(a) Insufficient	2	2	—	1	—
(b) Unsuitable or defective ..	43	41	1	26	—
(c) Not separate for sexes ..	—	—	—	—	—
Other offences against the Act (Not including offences relating to Outwork)	2	2	—	2	—
TOTAL	55	58	1	43	—

Outworkers. List of Outworkers Received During 1952

Description of Homework	No. of Outworkers	
	February	August
Making of wearing apparel	21	18

II. ADMINISTRATION OF THE SHOPS AND KINDRED LEGISLATION IN 1953.

By E. G. H. Spencer

(*Chief Inspector, Shops and Young Persons* (*Employment*) *Acts*)

SHOPS ACT, 1950

General Administration

8,322 visits were paid to retail premises liable to inspection under the Act, and 381 to wholesale shops or warehouses. These inspections, which show an increase of 2,381 over the number recorded for last year, were concerned not only with the closing-hours of shops, but with the welfare of nearly 20,000 assistants. 825 Infringements were noted on these initial visits and 1,395 re-visits were necessary before compliance was effected.

It is pleasing to record that legal proceedings and warning letters issued, show a slight decrease.

Exemptions in Respect of Retail Trade at Exhibitions

The following exhibitions were granted an exemption from the closing provisions of the Act :—

(1) The Bristol Horticultural and Chrysanthemum Society's Annual Exhibition, at the Drill Hall, Old Market Street.

(2) The City and County of Bristol Horticultural Show, held on Durdham Downs.

Two other applications were considered by the Health Committee, but no exemption orders were made. In each case the Committee was not satisfied that " the retail trade or business to be carried on, was subsidiary or anciliary to the main purpose of the exhibition ".

Certain other advertised exhibitions came to the notice of this Inspectorate and each was visited by an inspector. Where the Act was applicable, the Organiser or Secretary was advised accordingly, but not all were subject to the closing provisions.

Complaints

The number of complaints show a slight decrease over the preceding year. Approximately 85% alleged breaches of the closing regulations and the remainder were in respect of assistants' weekly half-holidays, meal intervals, compensatory holidays for Sunday employment, Young Persons' hours, lack of heating, and so on.

Observation Patrols

The regular system of patrolling on early-closing days was maintained throughout the year, and when necessary, during the evenings and on Sundays.

Lectures to Trade Organisations

" Shops Legislation " formed the subject of a lecture given to the Bristol Branch of the National Union of Retail Tobacconists, at the Grand Hotel in March.

New Legislation

The expected new Act is still awaited. Meanwhile, considerable interest has been aroused amongst other non-industrial employees, notably office workers, by the proposal to extend to this type of employment—" health and welfare " provisions similar to those contained in the existing Shops Act.

Recent press reports on the need for such extension, bear a striking resemblance to those of 1839. In that year, a writer who was expounding a case for shops legislation, was quoted :—

> . . . " who shall say that sixteen or eighteen hours of toil is not an infringement of the laws of nature. . . . though circumstances prevent our rulers providing for our welfare, will not the diseased lungs, which have their origin in confinement in a shop from eight in the morning till eleven at night, cause the subjects of our severity to unite and form a moral force which shall extinguish such cruelty ? "

Such protracted labour was cited then as the cause of a very high death-rate from consumption, and it is interesting to note that the same theory is propounded in a report which appeared in a Bristol newspaper in December 1953 :—

> Many Bristol office-workers were working in disgraceful conditions, said Mr. H. G. Chapman, assistant secretary of the Clerical and Administrative Workers Union, at a Bristol meeting. He had come from London to spend an afternoon looking over office conditions in the city. " I'm glad I did, otherwise I might not have believed these conditions existed," he said. Toilet facilities in some offices were like pigsties, he said. In one office, after lighting up time, he had been told the door must be left open as there were no lights in some rooms. " I realise this is an old city," Mr. Chapman declared, "and that many buildings have suffered from war damage, but I have seen offices on which no time should be lost in making them fit for people to work in."
>
> Local authorities should take positive steps to see that the main requirements of the Factory Acts were observed in offices.
>
> " The incidence of tuberculosis among clerical workers is greater than in any other body," said Mr. Chapman. " The money spent on sickness benefit might just as well be used to make offices reasonable."
>
> Mr. F. P. Farrell, area secretary of the union, explained why the clerical workers, of whom the union had about 3,000 in the engineering industry in Bristol, had shown their loyalty to the union by carrying on. The union was negotiating with the employers quite separately from the manual workers.

Other Enactments

(*a*) *The Young Persons Employment Act* 1938

105 visits were made to premises to which this Act applies. Four infringements were adjusted—one following a written warning and the remainder by verbal cautions.

(*b*) *The Sunday Entertainment Act* 1932

In accordance with custom, all cinemas that open on Sundays were visited at quarterly intervals. Four infringements were noted and it was necessary to report one of these to the Licensing Justices. The other infringements were adjusted on receipt of verbal warnings.

Staff

There have been no inspectorial changes during the year, the present staff being :—

Chief Inspector ..	(M)	1
Inspectors ..	(M)	2
Inspector ..	(F)	1
Clerk	(M)	1
Total ..		5

SUMMARY OF VISITS

Shops Act, 1950

1952 No.		1953
	Visits :—	
6,016	Retail	**8,322**
306	Wholesale	**381**
	Revisits :—	
1,136	Retail	**1,326**
35	Wholesale	**69**
	Infringements :—	
656	Failure to exhibit notices	**724**
63	Half-Holiday and compensatory holiday	**45**
8	Hours of Young Persons	**7**
37	Meal Intervals	**46**
	Seats for female assistants	**3**
743	Verbal Warnings	**807**
16	Warning Letters	**14**
5	Legal Proceedings	**4**
307	Assistants Facilities—Referred to C.S.I. (Section 38) ..	**712**
	Sunday Entertainment Act—Cinemas.	
77	Visits	**74**
31	Revisits	**8**
1	Infringements (holidays)	**1**
4	(records)	**3**
5	Verbal Warnings	**3**
—	Reported to Licensing Justices..	**1**
	Young Persons (Employment) Act 1938.	
97	Visits	**105**
3	Revisits	**5**
	Infringements :—	
3	(1) Night employment and hours	**1**
4	(2) Records	**1**
—	(3) Meal Intervals	**1**
3	(4) Half-day and compensatory holiday	**1**
10	Verbal Warnings	**3**
—	Warning Letters	**1**
	Inspectorial Staff—Work outside normal office hours.	
89	Evenings	**44**
13	Sundays	**10**

III. THE REPORT OF THE PUBLIC ANALYST & OFFICIAL AGRICULTURAL ANALYST FOR THE CITY & COUNTY OF BRISTOL FOR THE YEAR 1953

(*Incorporating the Work on behalf of the County of Gloucester for the same period*)

By E. G. Whittle, B.Sc. (Lond.), F.R.I.C.

Staff for the Year 1953

Public Analyst	E. G. Whittle, B.Sc. (Lond.), F.R.I.C.
Additional Public Analyst	I. Dembrey, B.Sc. (Bristol), F.R.I.C.
First Assistant	G. G. Fisher, B.Sc. (Birm.), A.R.I.C.
Second Assistant	Miss E. E. Wilks, B.Sc. (Lond.), A.R.I.C.
Third Assistant	J. Smyth, B.Sc (Bristol)
Fourth Assistant	D. J. Taylor B.Sc (Lond.), A.R.I.C.
Senior Spectroscopist	A. C. Candler, M.A. (Cantab.), F.Inst.P.
Assistant Spectroscopist	N. J. Atherton
Senior Technician	C. R. Turner
Chlorination Officer	R. C. M. Putnam
Laboratory Assistants	J. A. Pickard, E. A. Baker, G. J. Dickes, M. L. Passey, A. P. Long, J. E. Davies, J. K. Faulkner, B. C. Forty
Secretary	Mrs. M. M. Manning
Cleaning Staff	Mrs. N. Budd. Mrs. G. Wren (part-time)

Introduction

The pace set by the work of 1952 has been fully maintained and indeed that record year must now give place to 1953. The grand total of examinations was 6,818 and included 1,556 on behalf of the County of Gloucester. This represents an increase of nearly 200 samples as compared with 1952 and of 2,400 as compared with 1951.

This achievement is due entirely to the enthusiasm and great interest the staff have shown throughout the year, and to all members I express my sincere thanks for this, our best year. In the nature of things the more detailed and complex examinations fall to the senior members, but praise is due and gratefully given to the technicians who inevitably carry the burden of the more routine procedures.

I also acknowledge with gratitude the help given by the Additional Analyst, Mr. Dembrey, at all times a veritable mine of information on the many technical problems associated with the work and a good friend particularly of the technicians in the assistance and training he has given them.

Mrs. Manning, my secretary, has again been of the greatest help in coping with a bewildering variety of technical reports, and her ever-willing co-operation and industry are the more appreciated because she has not enjoyed the best of health during the year. Indeed, at the time of writing it has become necessary for her to enter hospital and it is with sincere regret that I have had to accept her resignation.

There were three staff changes in the year. Mr. Naish, who gave several years of valuable service, joined the research staff of the Imperial Tobacco Company. His post as second assistant was filled by promoting Miss E. E. Wilks and in consequence a vacancy then occurred for a fourth assistant. Mr. D. J. Taylor of Oldham was appointed to this post in October and is already quite definitely one of the family. I would also congratulate Miss Wilks on her promotion and upon securing the A.R.I.C. qualification.

Two technicians, Gough and Whittle left during the year and were replaced by J. K. Faulkner and B. C. Forty.

Our best wishes are extended to all former members of staff for their future happiness and we welcome all new members.

Some details of the work for the County of Gloucester are included —particularly points of common sampling interest.

I take this opportunity of thanking the Inspectors of both Authorities for their co-operation and great help in all sampling matters and by no means least for their part in creating the happy atmosphere and associations in all our efforts.

The Report is divided into nine sections, as under :—

	Introduction
	Summary of Examinations
Part I	Food and Drugs Act
Part II	Fertilisers and Feeding Stuffs Act
Part III	Waters, Swimming Baths samples, Effluents and Sewage Chlorination
Part IV	Rag Flock Act
Part V	Miscellaneous Analyses
Part VI	Pharmacy and Poisons Act
Part VII	Atmospheric Pollution
Part VIII	Spectrophotometry
Part IX	Other Activities

SUMMARY OF EXAMINATIONS

Table I, Bristol

Milk	514
Food and Drugs	2,236
Miscellaneous	914
Rag Flock	61
Fertilisers and Feeding Stuffs	81
District Inspectors' Samples	71
Water, Swimming Baths, etc.	236
Atmospheric Pollution :	
Gauges	84
Lead Peroxide	132
Continuous Smoke Filters	266
Phosphorus and Silica	36
Spectrophotometric Analyses	349
Chlorination visits and examinations	199
Control of water supplies to Hospitals	80
Poisons and Pharmacy Act	14
	5,273

Table 2, County of Gloucester

Milks	735
Food and Drugs	517
Water	95
Miscellaneous	108
Fertilisers and Feeding Stuffs	77
Atmospheric Pollution (Lead Peroxide)	24
Merchandise Marks Act	1
	1,557
GRAND TOTAL	6,830

PART I

FOOD AND DRUGS ACT

The primary function of the laboratory is of course, the examination of food and drugs to enforce the provisions of the main Act and the many Statutory Instruments controlling the composition of foods. Milk-sampling in the city has been somewhat less in the year under review and this is inevitable as milk supplies come more within the control of the larger companies. Food-sampling other than milk, has increased from 1,832 in 1952 to 2,236 in the present year. Of the 48 samples found to be adulterated, 24 were milks and 24 food and drugs.

It may be noted that a sampling rate of 3 per 1,000 of population has been widely accepted as a reasonable minimum and this laboratory can return a figure of 6·2 per 1,000 in respect of milks, food and drugs, whilst the grand total of 5,265 samples for the city represents nearly 12 samples per 1,000 of population.

New and Modified Legislation

The following new or amended Regulations became operative during the year.

1. *Meat Products* (*No.* 3) *Order* 1952
   This order, operative from the 1st January, 1953, prescribed standards for meat-content of pork, beef and sausage-meat.
2. *FSC/MC/Rep.* 9
   This report surveyed the subject of tin in canned goods and suggested a limit of 250 parts per million. No recommendations were made for foods and beverages not subjected to a canning process. Tin chloride once used to stabilise the colour of demerara sugar is considered an objectionable and unnecessary addition. The compound is not used in British refineries and any traces of tin in sugar and golden syrup are derived from the raw sugar.
3. *The Home Canned Fruit and Vegetable Order* 1950
   This was revoked and the Minister has decided not to make a Food Standards Order, under Regulation 2 of the Defence (Sale of Food) Regulations 1943, for the continuation of the standards of composition for canned fruit and vegetables.
4. *The Poisons* (*No.* 2) *Rules* 1952 became operative on 1st January, 1953, and brought dinitronaphthols, dinitrophenols and dinitrothymols into the First Schedule of the Rules.

5. *Offals in Meat Order* 1953 and M*eat Products* (*No.* 3) *Order* 1952. (See item 1 above)
This order removed the standards for the minimum meat-content of sausages and sausage-meat, but re-enacted the prohibition against the use of certain specified offals in uncooked open meat products.

6. *The Labelling of Food Order* 1953
This Order substantially re-enacts in a consolidated and revised form the Labelling of Food Order, 1950, and its amending Order. Certain new provisions have been introduced, the principal ones being—
(*a*) to define biscuits and flour confectionery for the purpose of the exemption in the First Schedule (Article 2) ;
(*b*) to require retailers who pre-pack food consisting of two or more ingredients on the premises where it is to be sold to declare, on and after 1st July, 1953, the ingredients on labels (Article 4 (3)) ;
(*c*) to permit the declaration on labels for intoxicating liquors to be printed in light block type on a dark ground or in dark block type on a light ground (Article 4 (4)) ;
(*d*) to impose requirements as to the labelling of French coffee and Viennese coffee (Article 3) such requirements to come into effect by stages on the dates specified in the Fourth Schedule.
(*e*) to permit emulsifying salts (as defined) and edible starch to be designated as such when forming an ingredient of some other food (Item 3 of Table A in the First Schedule).
(*f*) to exempt from the requirement to disclose ingredients those preparations specified in the 1948 British Pharmacopoeia and the 1949 British Pharmaceutical Codex (Item 8 of Table A in the First Schedule) such exemption to come into effect on 1st December 1953.
(*g*) the exemption from the requirement to specify the ingredients of beef and pork sausages and sausage-meat and home-canned fruit and vegetables now appears under Item 8 of Table A in the First Schedule.

Save as otherwise mentioned above, this Order comes into operation on 5th April 1953.

7. *The Food Standards* (*Preserves*) *Order*, 1953
This order is to be read with the Food Standards (General Provisions) Order 1944 as amended and replaces the Preserves Order of 1944. It prescribes revised standards for jam and marmalade including ginger marmalade. The standards for fruit curd and mincemeat are not changed. The standards prescribed by the Order shall apply to both imported and home-produced articles and comes into force in stages—the final stage being for sales by retail, given as the 1st May, 1954.

8. *The Food Standards* (*Ice Cream*) *Order* 1953
This order restored the standard of fat and solids-not-fat in ice cream to 5 per cent and 7·5 per cent respectively.

9. *Press Notice No.* 19753 *T*
This contains recommendations for revised limits for the fluorine content of acidic phosphates and foods containing them as follows :—

	Fluorine content
1. Acidic phosphate ..	maximum 30 parts per million
2. Baking powder and Golden raising powder	maximum 10 parts per million

3. Self-raising flour or similar mixtures containing a farinaceous substance and an acidic phosphate	maximum 3 parts per million

10. *Statutory Instrument No.* 726, 1953
The Milk (Great Britain) Order 1953, operative from 1st May, 1953, included in a separate Article the standard of not less than 4% of butter fat for Channel Islands Milk and also specifies a special defence.

11. *Press Notice No.* 21453
Recommendations relating to the use of antioxidants in food. The Food Standards Committee recommended that antioxidants should not be added to any foods, other than to edible oils and fats (but not butter) and to essential oils, to which it should be permissible to add either or both of the following antioxidants, in quantities not exceeding those stated.

Propyl gallate	0·01%
Butylated hydroxyanisole ..	0·02%

These recommendations are subject to periodic review and further do not preclude the use in foods of such substances as tocopherols, lecithin, citric tartaric and ascorbic acids which are normal constituents of many foods, or of alpha-isoascorbic acid, all of which have some antioxidant properties; nor do they preclude the packaging of foods in inert gases such as nitrogen or carbon dioxide.

12. *The Food Standards* (*Preserves*) (*Amendment*) *Order* 1953
Provides that the revised standards for damson, gooseberry and raspberry, gooseberry and strawberry jams, or any jam packed in a hermetically sealed container prescribed by the Preserves Order 1953, shall have effect as respects all sales on and after the 1st September, 1953.
The order also prescribes standards for fig and lemon jam and for rhubarb and ginger jam.

13. *The Feeding Stuffs* (*Revocation*) *Order* 1952
This Order abolishes all controls on the manufacture, distribution and price of feeding stuffs.

14. *The Oils and Fats* (*No.* 2) *Order* 1953
Replaces the earlier 1953 Order No. 210 and amendments with the following changes :—

    (1) The definition of " cooking fat " is revised to exclude all oils and fats, other than mixtures containing any of the oils laid down in the Second Schedule to the Order.

    (2) Restrictions on the sale of technical tallow and rendered pig fat other than lard, are removed and the definition of " lard " is amended to exclude the fat obtained by cooking pork.

15. *The Flour Order* 1953
Revokes and replaces the 1952 Order No. 749 as amended and makes the following changes.

    (1) The existing control of production and packing is abolished with, also, the controls on distribution, use and price.

(2) The addition of creta praeparata to all flour is now required unless it is flour which contains the whole product of the milling of wheat and no additions whatsoever.

(3) The restoration of certain specified nutrients is required to be made to all flours of an extraction rate of less than 80 per cent.

(4) Containers for National Flour and National Brown Flour for sale or otherwise than by retain must be marked or labelled to show their contents.

The following are the amounts of the compulsory additions :—

To all flour	Creta praeparata of such granularity that not more than 0·1% remains on a 100-mesh sieve and not more than 0·2% remains on a 240-mesh sieve. The addition is at the rate of 14 ounces per 280 pounds.
Flours of an extraction rate of less than 80%	Iron, Vitamin B and nicotinic acid in sufficient quantity to ensure a minimum of 1·65, 0·24 and 1·60 milligrams per 100 grams of flour. The three additions must be made in a form authorised by the Minister and such additions must comply with the standards laid down in the British Pharmacopoeia or the British Pharmaceutical Codex.

16. *The Bread Order* 1953
Revokes the order of 1952, No. 1781. The definition of National bread is revised and a definition of National brown bread is now provided. Substances which may be included in National brown bread and which may also be included in natural brown bread, are:—

> Oils and fats, salt, yeast, water, improvers of the nature of yeast food, any acid or acidic substances suitable for regulating the acidity of the dough, barm and, finally, any addition required in the Flour Order 1953 (see previous order above). This Bread Order and the Flour Order are to be enforced and administered by the Ministry, and Food and Drugs Authorities are requested to refer to the Ministry particulars of any samples which fail to comply with the Order.

17. *The Canned Corned Meat* (*Prices*) (*No.* 2) *Order* 1953.
This Order pertains to price-control and increases the retail price of canned corned meat.

18. *The Food Standards* (*Saccharin Tablets*) *Order* 1953
In this order a saccharin tablet or other sweetening tablet containing saccharin :—

(1) shall contain not less than 0·18 grain and not more than 0·22 grain of saccharin or the equivalent weight of soluble saccharin.

(2) may contain as excipient sodium bicarbonate with or without suitable substances, the total amount of excipient not to exceed four times the maximum quantity of saccharin.

(3) shall not contain more than 5% water insoluble matter nor less bicarbonate than that required to render the saccharin completely soluble.

19. *The Artificial Sweeteners in Food Order* 1953.
This Order prohibits the use of artificial sweeteners, other than saccharin, in the composition or preparation of any food sold or intended for sale for human consumption.

An " artificial sweetener " means any chemical compound which is sweet to taste, but does not include saccharin, any sugar or other carbohydrate or polyhydric alcohols. The Minister is prepared to consider the exemption of any other sweetening substance shown to be harmless.

20. *The Public Health* (*Condensed Milk*) (*Amendment*) *Regulations* 1953
Permit for a limited period the sale of full-cream unsweetened condensed milk, imported by the Minister of Food, containing not less than 7·8% of milk fat and not less than 25·5% of all milk solids including fat.

21. *The Public Health* (*Preservatives etc. in Food*) (*Amendment*) *Regulations* 1953
Provide for the sale and importation of certain specified dehydrated vegetables which contain sulphur dioxide within prescribed limits, increase the maximum permitted sulphur-dioxide content of jam, permit the presence of diphenyl in citrus fruit imported in wrappers treated with diphenyl and, for a limited period, the addition of borax to margarine.

22. *The Labelling of Food* (*Amendment*) *Order* 1953
This order :—

(1) permits the use of the description "Atholl Brose " to a product consisting of malt whiskey, oatmeal, honey and cream and containing not less than 25% of proof spirit.

(2) permits flour, National flour and National Brown flour to be sold without a declaration of ingredients in so far as they comply as regards composition with the requirements of the Flour Order 1953.

(3) removes from Table C of the 1st Schedule to the principal order specific reference to soft drinks, saccharin tablets and sweetening-tablets which are now the subject of Standard Orders.

23. *The Food Standards* (*Soft Drinks*) *Order* 1953
The principal changes made to the Soft Drinks Order 1947 are :—

(1) certain medicated and glucose beverages are exempt from the order.

(2) the standards with certain modifications, apply to soft drinks for consumption by diabetics and to ginger beer and herbal and botanical beers.

(3) the description of drink made from fresh whole oranges has been modified.

(4) references to non-alcoholic wine, non-alcoholic cider and non-alcoholic perry are omitted.

TABLE 3

FOODS

Nature of Sample	Total Examined	Number adulterated or otherwise irregular
Milk	514	24
Angelica	1	—
Arrowroot	9	—
Ales and Beers	35	
Acetic Acid	1	—
Almond Paste and Marzipan	12	—
Almonds, Ground	16	—
Apples	5	—
Bread	5	—
Barley, Pearl and Patent	8	—
Blancmange	21	—
Banana Curd	2	—
Batter Powder	1	—
Butter	24	1
Baking Powder	7	—
Bottled Gooseberries	1	—
Baked Beans	8	—
Breakfast Cereals	6	—
Cooking Fat	19	—
Condensed Milk	14	—
Colourings and Flavourings	65	—
Coffee, Coffee and Chicory Essences	25	—
Cakes and Pastries	15	—
Cheese and Cheese Products	36	2
Creams, Pure, Synthetic and Tinned	37	—
Curry Powder	14	—
Chocolate Spread	8	—
Cocoa	21	—
Custard Powder	11	—
Cornflour and Table Creams	16	—
Chocolate Rolls	3	—
Cake, Pudding and Sponge Mixtures	36	—
Crushed Oats and Oatmeal	12	—
Cider	18	—
Caraway Seed	2	—
Candied Peel	13	—
Coconut, Desiccated	16	—
Christmas Puddings	12	—
Champagne Perry	2	—
Cocktails	3	—
Chocolate Powder	1	—
Dripping	20	—
Dried Fruit and Vegetables	77	—
Dried Egg	4	—
Dried Milk	6	—
Dried Herbs	16	—
Dandelion Coffee Essence	1	—
Dressed Crab	2	—
Dessert Powders	2	—
Emulsifying Agent	2	—
Evaporated and Condensed Milk	5	—
Essences and Extracts	17	—
Edifas	2	—
Fish and Meat Paste and Fish Cake	21	—
Forcemeat	1	—
Flour, Self-raising, Plain, Cake and Soya	36	—
Fruit Malt Syrup	1	—
Gravy Browning	15	—
Glace Cherries	2	—
Golden Raising Powder	8	—
Gelatin	16	—
Ground Rice and Rice	18	—

TABLE 3—*continued*

Nature of Sample	Total Examined	Number adulterated or otherwise irregular
Golden Syrup	8	—
Gingerbread Mixture	1	—
Horseradish Cream	4	—
Honey	14	—
Ice Cream	235	2
Ice Lolly and Syrup	13	—
Ice Cream Lolly	2	—
Jams and Fruit Curds	46	—
Jelly Crystals and Cubes	28	—
Lemon and Barley Crystals	1	—
Lemonade Powder	3	—
Lemon Juice	1	1
Liquorice Sherbert	1	—
Marmalade	11	—
Mincemeat	17	—
Macaroni	6	—
Meringues and Powder	10	—
Meat Products other than Sausages	50	—
Milk Whipping Compound	6	—
Marshmallow	4	—
Mixed Spice and Pickling Spice	28	—
Margarine	19	—
Meat Extender	1	—
Mustard and Compounds	9	—
Mousse	1	—
Pepper and Pepper Compounds	30	—
Puff Pastry	2	—
Potato crisps	8	—
Pickles, Sauces and Ketchups	38	—
Peanut Butter	3	—
Potatoes, New	1	—
Parsley	1	—
Peeled Shrimps in Aspic Jelly	1	—
Pudding Sauce	1	—
Shredded Suet and Suet	25	—
Soups, Tinned and Powder	40	4
Salad Cream, Mayonnaise	15	—
Salt, Plain and Iodised	23	—
Spirits, Whiskey and Rum	40	—
Sausages, Beef, Pork and Chipolata	34	1
Sweets	15	1
Sugar, Icing Sugar and Sugar Products	28	—
Semolina	8	—
Stuffing	5	—
Soft Drinks	65	—
Suenut	1	—
Sweetened Fruit	1	—
Sausage Roll	1	—
Sago	2	—
Tinned Fish	41	—
Tapioca	5	—
Tinned Vegetables	18	—
Tinned Fruit	9	—
Tea	17	—
Trifle	1	—
Tomatoes	9	—
Vinegar, Malt, Cider and Non-brewed Condiment	30	3
Wines, Alcoholic and Non-alcoholic	8	—
Walnuts	7	—
Yeast	11	—
Youghourt	1	—
Total of Foods with Milks	2,411	39

DRUGS

Nature of Sample	Total Examined	Number adulterated or otherwise irregular
Almond Oil	3	—
Ammoniated Tincture of Quinine	9	2
Anadin Tablets	3	—
Arachis Oil	2	—
Aspirin Tablets	3	—
Adult Nerve Tonic	1	—
Antipyrine Tablets	1	—
Blackcurrant and Iodine Pastilles	1	—
Blackcurrant Syrup	1	—
Bicarbonate of Soda	17	—
Boracic Powder	7	—
Borax	6	—
Boracic Ointment	3	—
Bronchial Mixture	1	—
Brompton Cough Lozenges	1	—
Blue Unction Ointment	1	—
Brewers' Yeast Tablets	1	—
Boracic Crystals	4	—
Calcium Lactate Tablets	5	—
Camphorated Oil	6	—
Compound Vitamin Tablets	3	—
Castor Oil	6	—
Constipation Herbs	1	—
Cod Liver Oil	3	—
Compound Phenolphthalein Tablets	1	—
Composition Essence	1	—
Calamine Lotion	6	—
Cream of Tartar	2	—
Codeine Tablets	5	—
Calomel Tablets	2	—
Chlorophyll Tablets	1	—
Compound Glycerine of Thymol	3	—
Cough Preparations	3	—
Dandelion Root	1	—
Dilute Mercuric Nitrate Ointment	1	—
Ephedrine Hydrochloride Tablets	2	—
Epsom Salts	3	—
Extract of Malt	3	—
Extract of Malt and Cod Liver Oil	4	1
Elder Flowers	1	—
Flowers of Sulphur	3	—
Friars' Balsam	3	—
Fever and Influenza Mixture	2	—
Grey Powder Tablets	2	—
Gregory's Powder	2	—
Glycerin	6	—
Glucose and Vitamin D	6	1
Glauber's Salts	3	—
Halibut Oil Preparations	26	4
Hydrogen Peroxide	5	—
Influenza Mixture	2	—
Infirmary Cough Mixture	1	—
Iodine Ointment	1	—
Linseed Oil	3	—
Liquid Paraffin	12	—
Liquorice Powder	6	—
Magnesium carbonate	3	—
Marshmallow Herb	1	—
Nigroids	1	—
Olive Oil	6	—
Oil of Cinnamon	3	—
Oil of Cloves	3	—
Phenacetin Tablets	5	—
Pain Relief Tablets	1	—

TABLE 3—*continued*

Nature of Sample	**Total Examined**	**Number adulterated or otherwise irregular**
Phenol Ointment	3	—
Parrish's Food	6	—
Phenolphthalein Tablets	2	—
Phenazone Tablets	2	—
Rose Hip and Orange Syrup	6	—
Saccharin Tablets	7	—
Sulphur Ointment	2	—
Seidletz powder	6	—
Sulphur and Lime Tablets	8	—
Sal Volatile	9	1
Sodamint Tablets	6	—
Scott's Dressing	4	—
Salicylic Ointment	2	—
Sciatica Remedy	1	—
Sleep Inducing Tablets	1	—
Surgical Spirit	3	—
Tartaric Acid	5	—
Tincture of Iodine	3	—
Turpentine	3	—
Veganin Tablets	4	—
Vitality Tablets	1	—
Vitamin Preparations	10	—
Wormwood Herb	1	—
White Precipitate Ointment	3	—
Wood Betony	1	—
Zinc Ointment	6	—
Total of Drugs	339	9
Total of Foods and Milk	2,411	39
TOTAL	2,750	48

Table 4

	1949	1950	1951	1952	**1953**
Total No. of Samples	2,184	2,837	1,748	2,524	**2,750**
Milks per cent. adulterated	1·73	2·90	9·24	8·09	**4·67**
Foods (other than milk) per cent. adulterated	2·67	2·39	1·93	1·34	**0·89**
Drugs per cent. adulterated	11·11	2·17	6·2	1·60	**1·18**
Total per cent. adulterated	2·15	2·57	4·86	3·21	**1·64**

Table 5

Average Composition of Genuine Milks for 1953

Month	No. of Samples	Fat % average	Non-fatty solids % average
January	95	3·86	8·75
February	42	3·63	8·73
March	24	3·59	8·62
April	34	3·54	8·92
May	28	3·49	8·81
June	12	3·38	8·74
July	41	3·73	8·78
August	9	3·91	8·75
September	19	3·44	8·88
October	52	4·02	8·91
November	22	3·84	8·68
December	112	3·93	8·81
TOTAL	490	Average for year : 3·78	8·77

Milk

514 Milks were examined for fat, non-fatty solids and preservatives, formaldehyde, boric acid and sodium nitrite. In all cases where the non-fatty solids fell below the presumptive 8·5% standard, the freezing-point depression was determined in the Hortvet apparatus. A paper by Williams & Ellis, in the *Municipal Journal* 1953, appeared to cast doubts upon the value of the Hortvet test where cows were subjected to an unusual watering regime. The animals concerned in the experiments had no water available to them during the night—a period from 4 p.m. to 8.30 a.m. This restriction of watering produced Hortvet figures less than the normally accepted minimum of 0·530° C. ; the lowest recorded depression was o·518° C. This order of depression would not normally be regarded as anything more than suspicious in this laboratory, but would certainly warrant follow-up samples and in all cases the " appeal to cow " samples should reveal unusual watering techniques.

It may be pointed out also that certain of the milks examined in the survey given by Williams & Ellis indicate milks below the presumptive 8·5 per cent non-fatty solids standard which, but for the saving grace of the Hortvet test, would have been considered as adulterated milks until the contrary was proved. The failure to provide water for the cows at all times seems tantamount to cruelty to the animals, and in the two farms reviewed the practice has now been stopped for the very obvious reason that milk yields were less under the abnormal regime than when the animals had free access to water. Incidentally, reversion to free access to water produced normal Hortvet figures.

All inspectors sampling milks for the Bristol and Gloucester authorities are now asked to enquire concerning the " watering regime ", and the certificate issued now includes the final phrasing that " . . . the freezing point (Hortvet) of a genuine milk is never less than 0·530° C. where cows have received a normal watering regime ".

It is understood that the whole question has now been referred to the Dairying Research Institute at Shinfield.

All milks were free from preservatives and it was not necessary to examine any sample for added colourings. Tests for hypochlorite were required occasionally to check upon the efficiency of churn-washing. Certain hypochlorite preparations can be used for this purpose and the presence of chlorate in the milk is used as an index of failure to remove hypochlorite completely. Residual hypochlorite in the milk may, of course, upset bacteriological findings.

24 Milks were reported as adulterated.

V 35	Informal	21·7%	deficient in fat.
38	Informal	15·0%	,, ,, ,,
49	Informal	5%	,, ,, ,,
W 23	Informal	15%	,, ,, ,, and abnormal non-fatty solids.
24	Informal	12·9%	Added water and 6·6% deficient in fat.
Z 17	Informal	13·3%	deficient in fat.
W 32	Formal	6·6%	,, ,, ,, but the bulk consignment was genuine.
W 37	Formal	8·3%	deficient in fat.
38	Formal	23·3%	,, ,, ,, "Appeal to cow" samples on W 37 and W 38 later proved to be of poor quality in respect of fat.
W 42	Informal	18·3%	deficient in fat but bulk consignment was genuine.
V115	Informal	15%	deficient in fat Bulk fat of V 109–V 124 was
123	Informal	16·6%	,, ,, ,, 3·4%.
133	Informal	15%	,, ,, ,,
136	Informal	11·6%	deficient in fat with a doubtful freezing-point depression.
138	Formal	11·6%	deficient in fat.
144	Formal	45%	,, ,, ,,
X 50	Informal	12·9%	Added water
56	Formal	23·5%	,, ,,
58	Formal	11·2%	,, ,,
62	Formal	1·2%	,, ,,
V181	Informal	2·9%	Added water.
198	Formal	5·9%	,, ,,
211	Informal	6·6%	Deficient in fat.
X 91	Informal	11·8%	Added water and an abnormally low N.F.S. prior to watering.

Certain other samples of milk required comment which may be summarised thus :—

38 Milks were found to contain less than the presumptive standard of 8·5% solids not fat, but the Hortvet test indicated satisfactory freezing-points in all cases and the milks were returned as genuine but with abnormal non-fatty solids.

Two samples were classified as suspicious, having the following analytical figures :—

Non-fatty solids .. 8·37% with △ 0·525° C.
,, ,, .. 8·35% ,, △ 0·509° C.

Two samples were classed as of poor quality in respect of fat. Both contained 2·9%.

Seven "appeal to cow" samples gave the following relevant data.

W 43	Formal	.. .. ..	Fat 3·55%
44	,,	.. .. ..	,, 3·05%
45	,,	.. .. ..	,, 2·40%
46	,,	.. .. ..	,, 2·40%

These four relate to W.37 and W 38 previously returned as fat-deficient.

X 59	Formal	Non-fatty solids 8·50%	△ 0·536° C.
60	,,	,, ,, 9·10%	△ 0·551° C.
61	,,	,, ,, 8·55%	△ 0·553° C.

These three relate to X 50, X 56, X 58 and X 62 all reported above as watered milks.

Of the nine Channel Island samples, eight contained not less than the required minimal 4% of milk fat. The remaining sample contained 3·7% of fat, but in association with a second sample with 5·7% fat produced a bulk milk satisfying the minimum requirement.

Foods other than Milk

The following foods were reported as adulterated or irregular

Table 6

VD	30	Pork Sausage	Formal	28·1% deficient in meat.
XD	41	Malt Vinegar	Formal	Not more than 50% of malt vinegar.
	43	Butterscotch Creams	Informal	Contained not more than 0·7% of butter fat.
VD	283	Cream Cheese	Informal	5·5% butter fat on dry basis.
	298	Cream Cheese	Formal	1·9% butter fat on dry basis.
WD	70	Malt Vinegar	Formal	A non-brewed condiment.
XD	93	Ice Cream	Informal	10% deficient in fat.
	156	Malt Vinegar	Formal	Not more than 50% of malt vinegar.
	159	Ice Cream	Informal	32% deficient in fat.
WD	113	Canned Tomato Soup	Informal	Tin 4 grains per pound.
	114	Canned Tomato Soup	Informal	Tin 4 grains per pound.
	115	Canned Tomato Soup	Informal	Tin 3·4 grains per pound.
	116	Canned Tomato Soup	Informal	Tin 3·8 grains per pound.
ZD	249	Butter	Informal	Contained 9·4% excess of water.
	264	Lemon Juice	Informal	Contained only 1·5 mgms. of Vitamin C per 100 g.

Drugs

The following drugs were returned as adulterated or irregular

Table 7

VD	90	Halibut Liver Oil Capsules	Informal	20% deficient in Vitamin A per capsule.
	153	Halibut Oil and Calciferol	Informal	73% deficient in Vitamin A per capsule.
XD	30	Glucose powder with Vitamin	Informal	Contained 0·46% of calcium phosphate against a declared 1·0%.
YD	66	Extract of Malt with Cod Liver Oil	Informal	Contained 7·65% w/w of Cod Liver Oil. Should contain not less than 10%.
	104	Sal Volatile	Informal	78% deficient in ammonia and 72·6% deficient in ammonium carbonate.
VD	525	Halibut Liver Oil Capsules.	Informal	13·3% deficient in Vitamin A.
	526	Halibut Liver Oil Capsules.	Informal	70·9% deficient in Vitamin A.
YD	169	Ammoniated Tincture of Quinine.	Informal	50% deficient in ammonia.
	170	Ammoniated Tincture of Quinine.	Informal	45% deficient in ammonia.

Comment on samples found to be infested or of poor quality

Table 8

VD	154	Canned Soup	Informal	Tin 2·2 grains per pound.
	162	Barley Crystals	Informal	Out of condition—badly liquefied.
	165	Steak & Kidney Pie	Informal	Only 3·2% of meat in pie.
	216	Oatmeal	Informal	Heavily infested with mite.
WD	1	Beef Sausage	Informal	Meat content 48%.
	2	Pork Sausage	Informal	Meat content 61%.
	52	Semolina	Informal	Heavily infested with mite.
XD	67	Halibut Oil	Informal	8% deficient in Vitamin A.
ZD	61	Cake Flour Mixture	Informal	No evidence of carbon dioxide.
VD	390	Split Peas	Informal	Slightly infested with Lepinotus inquilinus.
	451	Halibut Liver Oil Capsules.	Informal	6% deficient in Vitamin A.
	467	Pork Sausages	Informal	Meat content only 59%.
	470	Pressed Cheek	Informal	Meat decomposing.
	479	Raspberry Flavouring	Informal	Undue acidity.
	481	Strawberry Flavouring	Informal	Undue acidity.
	497	Essence of Dandelion Coffee.	Informal	Comment on the word " coffee ".
	516	Raspberry Flavouring	Informal	Undue acidity.
	533	Raspberry Flavouring	Informal	Undue acidity.
	567	Pickled Onions	Informal	Out of condition and cap badly corroded. Iron in the pickles.
WD	162	Iodised Salt	Informal	Iodine 350 micrograms per ounce. Declared 430 to 720.
XD	210	Pork Sausage	Informal	Meat content only 58%.
	217	Ice Cream	Informal	Fat 4·8%.
	265	Sciatica Remedy	Informal	Infested with a species of book louse.
YD	140	Turpentine	Informal	All contained a high non-volatile residue and had high wt. per ml. figures.
	141	Turpentine	Informal	
	142	Turpentine	Informal	
	153	Scott's Dressing	Informal	Low mercury content.
	154	Scott's Dressing	Informal	
	158	Scott's Dressing	Informal	
	175	Oil of Cloves	Informal	Low eugenol content.
VD	634	Oats	Informal	Heavily infested with mite.
	643	Crushed Oats	Informal	Heavily infested with mite.
	804	Whiskey	Formal	Poor quality. 63·6% proof spirit.
	812	Dried Milk Powder	Informal	Poor quality. Powder not completely soluble.
WD	207	Canned Peeled Plum Tomatoes	Informal	Copper 104 parts per million on the dry basis.
XD	326	Beef Sausages	Informal	Meat content 47%.
	341	Semolina	Informal	Heavily infested with mite. Ephestia also present.
	346	Dried Peas	Informal	Poor quality. Signs of infestation.
	350	Ham and Tongue Paste	Informal	Meat content 49%.
	361	Dried Figs	Informal	Heavily infested with mite.
	427	Orange Drink	Informal	Contained lead equivalent to 1 part per million.
	434	Walnuts	Informal	Poor quality.
	443	Walnuts	Informal	Infested with mites and moth larvae.
YD	216	Compound Glycerin of Thymol	Informal	Low in glycerin.
ZD	342	Soda Water	Informal	Low in sodium bicarbonate.

Fatty Substances

All the samples of butter, margarine, cheese, dripping, cooking fat, and suet, block and shredded, were satisfactory, with the exception of one informal butter found to contain 17·5% of water. A repeat formal sample proved to be satisfactory.

Two alleged cream cheeses proved of some interest. The informal sample contained only 5·5% butter fat, calculated on the dry basis, whilst the formal sample was even worse at 1·9%. However, subsequent investigation proved that the cheese was in fact " Twaroc ", or Polish curds. It was sold from a delicatessen store and was in demand and well known to a continental colony within the city. There was certainly never any intention that it should be sold as cream cheese.

All fatty foods were free from undue acidity or rancidity. Cooking fats contained no undue moisture, whilst the margarines all gave evidence of boric acid well up to the permitted 0·25%. The addition of boric acid to margarine seems hardly desirable now and indeed it appears likely that such preservation may shortly cease.

Canned Goods

These commodities were generally very satisfactory and only four samples of canned tomato-soup received adverse comment for excessive amounts of tin. The stock represented by these samples was surrendered for destruction.

In my report for 1952 I made a plea for the dating of canned goods and would extend this to include all prepacked foods. The Food and Drugs Bill now before Parliament seems to make such dating a necessity since a clause of the Bill will permit a certain latitude in the sampling of canned goods.

Clause 18 (1) reads :—

> " Where any person procures a sample consisting of a food, drug or substance contained in unopened containers, and the division into parts of the food, drug or substance contained in those containers is not reasonably practicable or might affect the composition or impede the proper analysis of the contents, the provisions of section seventeen of this Act or of section seventy-two of the principal Act, as the case may be, with respect to the division of samples into parts shall be deemed to be complied with if the person procuring the sample divides the containers into the requisite number of lots and deals with each lot as if it were a part in the manner provided by those sections ; and references in this Act or that Act to a part of a sample shall be construed accordingly."

It would appear that if such a course is adopted it can only be justified if the three cans (or lots) are of the same batch and age. Hence I contend that dating of such prepacked goods will be essential. This point was put to the Association of Public Analysts and it is hoped that an additional clause may be added to the Bill to deal with the matter.

It will no doubt be contended that manufacturers will be aware of the age of their commodities from particular code marks, but it appears desirable that inspectors and the public should likewise be able to assess the age of a particular pack.

There is also little doubt that such dating could lead to better " housekeeping " within stores inasmuch as it would be simpler to turn over stocks in stricter rotation. After all, photographic film is at least given a latest date of useful life, so no less should be required of foodstuffs.

Ice Cream and Ice Lollies

The position with regard to the composition of ice cream is satisfactory. Of the 235 samples examined two only warranted comment for failure to comply with the Ice Cream Order. Both were deficient in fat and being informal samples were followed by formal sampling. The repeats proved satisfactory.

No difficulties occurred with ice lollies as far as metallic contamination was concerned, but with the rapid growth of popularity of this sweetmeat it is surely time that minimal requirements were imposed for composition. Essentially the lollies contain sugar, some organic acid, generally citric acid, flavouring and colouring. A minimum 10% of sugar seems desirable, with some indication of maximum permissible limits for metals.

A hybrid consisting of part lolly and part ice cream became very popular with the children in the latter part of the year. Again some standard seems necessary, and presumably if a lolly were defined, then standards of hybrids of this character could be applied. A more important matter for consideration is, of course, the manufacture and hygienic control essential for commodities so prone to contamination.

Sausages

With the removal of the standards of composition for meat-content, fewer sausages samples have been taken and examination has been directed to a search for preservatives. No sample contravened the regulations. Just prior to the removal of the standards for minimum meat content, early in the year, one formal sample of pork sausages was found to be 28% deficient in meat. The matter was reported to the Ministry but nothing further was heard of the matter.

Sweets

One sample of the 15 " butter " sweets examined received adverse comment. This was a sample of butterscotch creams, which contained not more than 0·7% of butter fat. A letter was sent to the manufacturers. Only a Code of Practice controls the use of the word " butter " in such sweets, provided the manufacturer is in fact a party to the code, otherwise little action seems possible.

Vinegar and Non-Brewed Condiments

Thirty samples were examined and three were returned as adulterated. All samples were free from vinegar eels. One alleged malt vinegar was entirely a non-brewed condiment and a warning was issued. The other two samples, again alleged to be malt vinegar, contained not more than 50% of this vinegar in admixture with non-brewed condiment. In each case there was unfortunately insufficient evidence as to the offence.

Lemon Juice

This informal sample stated to be freshly expressed lemon juice was found to contain 1·5 milligrammes of Vitamin C per 100 grammes. Lemon juice should contain 30 to 70 milligrammes per 100 grammes. The remaining stock was withdrawn from sale.

Christmas Puddings

A survey of some twelve puddings of reputable manufacture was made and produced the following information. All were of satisfactory weight as compared with the stated weight ; moisture figures were extremely variable and ranged from 15·5% to 36·7%. The fat-content was not so variable and ranged from 8% to 12% of the original pudding, but the sugar, calculated as sucrose, was as variable as the moisture and ranged from 15·2 to 38·9%. A further point of interest was the fact that in most cases the inversion of the sucrose was practically complete. The price per pound varied from 2s. 3d. to 3s. 9d., and without some minimal requirements it appears to be a case of " you pay your money and take your choice ".

Preservatives and Colouring Matters

All the staple foods, margarine excepted, were free from preservatives and colourings. No contraventions of the Preservative Regulations were found in the various foods which are permitted limited amounts of benzoic acid or sulphur dioxide.

Sixty-five colourings and flavourings were examined, of which four flavourings were found to have undue acidities—probably due to long shelf life or adverse storage conditions.

In view of recent developments in the field of antioxidants for edible oils and fats, and the changing aspect of food preservation, the Preservatives, etc., in Food Regulations require urgent consideration and revision and a small but significant start has been made—see page 52, Press Notice No. 21453, which recommends maximum amounts of propyl gallate and butylated hydroxyanisole for use in edible fats and oils (excluding butter) and to essential oils. The Amendment Regulations 1953 also provide for sulphur dioxide in certain dehydrated vegetables, the presence of diphenyl in wrappers for citrus fruits, and for a limited period permit the continued addition of borax to margarine.

Drugs

A marked increase in the sampling of drugs is noted, 339 against 189 for the year 1952. Nine samples received adverse comment and are listed with comment upon the irregularities.

Certain other preparations were returned as of poor quality and these included halibut-oil capsules, sciatica remedy, turpentine, Scotts dressing, oil of cloves, and compound glycerin of thymol.

PART II.—FERTILISERS & FEEDING STUFFS ACT

68 samples were submitted by the official samplers, together with 13 from the Port Health Authority and 77 on behalf of Gloucester County, that is a total of 158. For the most part the infringements were not of a serious character and it will suffice to comment on the unsatisfactory samples.

Table 9

No.	Nature	F or I	Comment
2	Sulphate of Ammonia ..	I	Not sulphate of ammonia but 80·3% of potassium chloride.
3	Sulphate of Ammonia ..	I	Satisfactory but requires a statement on acidity.
10	Mineral Mixture ..	F	Bone present in finely divided state. Product really intended as a mineral adjunct.
1A	Calf Cubes	F	Oil 5·2%. Range of variation 3·6 to 4·4%.
14	National Growmore ..	I	Statutory statement necessary.
24	Superphosphate	I	Statutory statement necessary. Product contained only 7·3% of soluble P_2O_5.

No.	Nature	F or I	Comment
25	Hydrated Lime	I	Sample had undergone carbonation and contained only 52·0% $Ca(OH)_2$, together with 37·0% of $CaCO_3$.
27	Basic Slag	I	Contained an excess of phosphate.
17	Feeding Bone Flour ..	I	Statutory statement necessary.
18	Poultry Balancer Meal ..	F	Fibre at 7·2% is outside the lower limit of variation.
19	Unrationed Poultry Meal	F	No substances identified which would imply a Feeding stuff within the Act.
29	Base Fertiliser	I	Reversion of soluble P_2O_5 to insoluble form.
32	Seamus	F	Contained an excess of insoluble P_2O_5 nitrogen and potash.
38	Compound Fertiliser ..	F	Contained an excess of insoluble P_2O_5.
39	General Purpose Fertiliser	F	Slight excess of insoluble P_2O_5.
46	National Growmore ..	I	Excess of soluble P_2O_5.
49	Hop Manure	I	Slight excesses of insoluble P_2O_5 and potash.
50	Potassic Superphosphate	I	Not specifically mentioned in the F & F Schedules but regarded as satisfactory in respect of soluble P_2O_5 with a considerable excess of both insoluble P_2O_5 and potash.
52	Liquinure	I	51·3% deficient in nitrogen and 20·3% deficient in potash.
53	Sulphate of Ammonia ..	I	Satisfactory but requires statement in acidity.
A 2	National Cattle Food ..	F	25% deficient in oil.
A 3	Calf Pencils	F	Slightly low in fibre.
A 4	Hen Battery Pellets ..	F	Oil 0·25% above the upper limit of variation.
A 5	National Poultry Food Battery Intensive	F	Oil slightly high. Fibre slightly low.
58	Osmotoid	I	A mixture of 50% potassium permanganate and 50% copper sulphate. Not a true fertiliser.
62	Bone Meal	F	Nitrogen 25% in excess of the stated amount.
63	Dried Blood	I	Apparently low solubility.
64	Bone Meal	I	Statutory statement required.
65	Granular Fertiliser ..	F	Slightly low in potash.
54	Poultry Balancer Meal ..	F	Wheat flour and oatmeal detected. Statutory statement required.
60	Rich Dairy Nuts ..	F	Oil 56% in excess of the stated amount.
A 7	Battery Laying Meal ..	F	Fibre somewhat low.
A12	Grain Balancer Pellets ..	F	23·7% deficient in oil. 21·3% deficient in protein.

The comment in respect of Gloucester County samples may be summarised as follows :—

	Formal	*Informal*	*Irregular or requiring comment*
Feeding stuffs ..	23	15	14
Fertilisers ..	7	32	14
	30	47	28

Thus, of the total of 158 fertilisers and feeding stuffs samples, 61 required comment of one sort or another.

PART III.—WATER ANALYSIS AND SEWAGE

Table 10

Bristol

City water from tap at Canynge Hall	51
City water from pumping station, Knowle	12
Downend and Frenchay Hospital (West Gloucester Supply) ..	24
Wells, streams, lakes, etc.	5
Seepage, Sewage, Trade Effluents and River Waters	14
Docks and Ships in Port	16
Private Houses	3
Swimming Bath Waters	109
Miscellaneous	2
	236

Table 11

Source	Bristol Supply		West Gloucester Supply
	Tap at Canynge Hall	Tap at Jubilee Rd., Knowle	Taps at Downend and Frenchay
No. of Samples	51	12	24
	Parts per million		
Total Solids	286	341	316
Mineral Matter	238	291	281
Loss on Ignition	48	50	35
Chlorine as Chlorides ..	11·9	11	24·7
Nitrate Nitrogen ..	1·37	1·81	1·05
Free Ammonia	0·045	0·08	0·01
Albuminoid Ammonia ..	0·032	0·01	0·02
Total Hardness	241	296	246
Permanent Hardness ..	57	68·5	50·5
pH	7·7	7·4	7·6

The city and hospital supplies were satisfactory apart from nine samples which gave some evidence of bacteriological contamination. Five of the 16 samples from the docks and ships in port gave evidence of contamination.

Of 109 swimming-bath waters examined, 21 contained less than 0·2 parts per million free chlorine, and the Baths Superintendent was advised to step up the dosage at the baths concerned.

Gloucester

64 samples of drinking-water were examined. Only 18 were satisfactory both chemically and bacteriologically. The remainder gave evidence of pollution or contamination of varying degree.

Wells, Springs and Boreholes	39
Public Supply (Mains at source)	25
Sewage, Sewage Effluents and Trade Wastes	19
River, Canal and Stream Waters	8
Miscellaneous	4
	95

Chlorination

General

Treatment of sewage was commenced just before Whitsun, but tidal conditions and inclement weather enabled all plant to be closed down again for the first two weeks in June. Chlorination was then restarted at a low rate of dose, but heavy treatment was required from 25th June until 9th July. Except for six days in mid-August, treatment remained at the low rate until all plant was closed down at the end of September.

The total chlorine consumption for the year was 56 tons.

River Treatment

Owing to weather conditions, very little treatment of the river was necessary and no new experiments were made. It is hoped that some high-capacity plant will be installed early next season, so that the effect of short bursts of heavy treatment on tidelocked sewage may be gauged.

Trade Effluents

While at the present time trade effluents in Bristol are not as serious a problem as in some inland areas, many new factories and processes are coming into use, and the discharge from all new plant is closely controlled under the Drainage and Pollution Acts of 1937, 1950 and 1951.

The department is frequently requested to give technical advice and assistance in solving drainage and treatment problems consequent on the administration of those Acts.

Additional Activities

The supervision and chlorination of the paddling pools at Blaise Castle and St. Andrew's Park has been carried out as in previous years and some suggestions have been made regarding the improvement of water supply to these pools, and representations have also been made regarding the factors which should influence the construction of projected pools in other parks.

The Public Analyst is frequently asked for advice on water corrosion, scaling and similar problems and, in the majority of cases, a visit to the site is necessary, in order that any analytical information can be reinforced by technical data gathered on the spot.

By arrangement with the City Valuer, the chlorinator installed at Periton Mead Open Air School, Minehead, has been serviced and maintained as in previous years.

Work for Outside Authorities

The water supplies at Ham Green Hospital and Charterhouse Sanatorium were regularly checked and the chlorinators and water-softening plant maintained by arrangement with the Hospital Management Committee.

The department was able to be of assistance to the Stroud Urban District Council in investigating water-pollution problems at the open-air swimming pool at Stratford Park.

A chlorinator was hired to the Stroud Authority in order to supplement the treatment of the bath water.

PART IV.—RAG FLOCK ACT

61 samples were examined as prescribed by the 1913 Regulations. The laboratory is not yet equipped to carry out the tests prescribed by the Regulations made under the Rag Flock and Other Filling Materials for 1951. Comment has been made in two earlier Annual Reports, 1951 and 1952, regarding the situation and no new development can be reported.

Comment is made on the following samples :—

			Parts chlorine per 100,000	
R.F.	5	White cotton felt	107	
	7	Teased coir fibre	85	
	10	White felt	97	
	12	Coir fibre	109	
	15	Kapok	76	
	17	Lintafelt	97	
	19	Coir fibre	118	
	21	Lintafelt	127	
	23	Coco fibre	152	
	25	Coir fibre	152	
	26	Hair	9	
	27	White cotton felt	55	(If **unused** felt—no chloride standard prescribed.)
	30	Coir fibre	30	
	31	Hair	15	
	34	Mill puff	109	(If **unused** cotton mill puff—no chlorine standard prescribed)
	35	Hair	112	
	40	Coco fibre	39	
	43	Coir fibre	79	
	46	Linta felt	121	
	47	Coir fibre	158	
	51	Cotton wool felt	106	
	53	Lintafelt	73	
	54	Feathers	9	
	55	White cotton felt	79	
	56	White cotton felt	77	
	58	Fibre	200	(Fibres not identified)

All the foregoing samples were informal and in all cases the 1951 Act and Regulations prescribe no chloride standard.

One sample, R.F. 49 Tunstead 72″, was found to consist principally of jute fibres and contained 120 parts of chloride per 100,000. This figure is excessive, but since other control examinations could not be made, no action could be recommended for this commodity.

I have a growing conviction that in its present form the Act and Regulations are not likely to be efficiently worked by local authorities. In this laboratory, the requirements would be for new apparatus, extra room and not less than one assistant for the work involved.

PART V.—MISCELLANEOUS ANALYSIS

Table 12

1.	Infestation	44
2.	General	221
3.	Biochemical and Toxicological	39
4.	District Inspectors' Samples	65
5.	Atmospheric Pollution	22
6.	University Departments	3
7.	Spectrophotometry	37
8.	Preventive Medicine Department	14
9.	Ministry of Food	19

Bristol Corporation Departments

10.	Town Clerk	1
11.	Central Purchasing	10
12.	Port Health	212
13.	City Engineer	250
14.	Port of Bristol	6
15.	Fire Brigade	14
16.	Transport and Cleansing	13
17.	Rat Repression	1
18.	Education	3
19.	Baths Department	1
20.	Housing Department	4

Gloucester County

21.	Gloucester County	108
22.	Gloucester County Atmospheric Pollution	24
	TOTAL	1,111

I.—Infestation including Foreign Bodies in Foods, Etc.

44 samples were submitted for identity of insects and foreign bodies in foods, and so on. In the main the contamination of foods by foreign substances has been dealt with by inspectors' visits and letters of caution to vendors of the offending goods. The gravity of the offence must be assessed on the merits of the case and should include both a consideration of the type of contaminant and no less the great care exercised in manufacture. Repetition of offences and lack of co-operation in ensuring adequate control of processing will naturally determine the action of the local authority. A full list of samples examined is given to indicate the extraordinary and variable nature of offending bodies.

Laboratory No.	Article	Comment
2	Blackcurrant flavour	Contained 35 insects of the order diptera and including the blue bottle house fly and species of midge. Contained 500 ppm of benzoic acid.
217	Bread	Dead moth—Tineola biselliella—common clothes moth.
219	Custard Tart	Rodent excreta.
222	Slice of bread	Rodent excreta.
225	Dried Apricots	Excreta, webbing of moth larvae.
231	Butter	Penicillium mould (probably from wrapping) and incipient rancidity.
264	" Caterpillars "	Leather jackets or the larvae of the crane fly.
268	Beetles	Species of weevil.
286	Beetles	Powder post beetles or Lyctus Brunneus.
296	Beetles	Attagenus Pellio—Dermestidae family.
307	Beetle	Species of weevil. This beetle was found on bacon which is not normally infested with this pest.
325	Fritter	Moth larva.
330	Loaf	Portion of cigarette.
392	Insect	Solitary bee or Andrena fulva.
396	Insects	Anobium striatum.
416	Insects	Ground beetle.
446	Insect	Cricket in nymph form.
451	Loaf	Insect—portion of male cockroach—Blatta orientalis.
452	Flour	With piece of decomposing meat.
518	Bread	No excreta or oil.

Laboratory No.	Article	Comment
520	Fly	Proved to be a small wasp—Cyanipoidea.
521	Beetle	Garden beetle not further identified.
522	Insects	Golden Spider Beetle, Niptus hololeucus.
562	Insects	Human fleas.
586	Chocolate	No insects—debris present.
588	Insects	Fly maggots—probably blow fly.
602	Insects	Found in raisins—moth and larvae.
620	Macaroni	Piece of iron wire.
621	Cake	Piece of dried fruit or sultana.
657	Figs	No mite—but in dirty condition containing debris from sacks, etc.
654	Cashew Nuts	Moth larvae.
662	Bottle of milk	Minute algal growths.
705	Loaf of Bread	Piece of dirty, unrisen dough.
795	Maggot	Pupa of insect.
796	School Meal	No insects found.
799	Chocolate powder	Ephestia kuhniella.
800	Chocolate powder	Webbing and excreta.
816	Sweet	Charred organic matter—charcoal.
818	Insect	A portion of mouse excreta.
819	Christmas Pudding	Not hairs but hemp fibres.
824	Confectionery	Embedded elastoplast dressing—but unused.
848	Biscuit	Excreta, webbing and pupal case of moth.
895	Bottle of Milk	Contained a blood clot.
992	Bread	Nail present.
1013	Insect	Plaster beetle, Lathridius nodifer.

PART V

2.—General

Once again a remarkable range of articles has been examined in this particular category and has included foods, water deposits and air samples and numerous articles not classified in other sections of the report. Those items of special interest will be discussed briefly.

Air samples were taken at the Territorial Army Headquarters, Bristol, as a result of complaints made to the Chief Sanitary Inspector, of ventilation difficulties, and several examinations for humidity, carbon dioxide, etc., made it possible to suggest certain improvements to the heating and ventilation of the offices.

Several meat specimens were submitted either for the presence of dye or the detection of possible horse flesh. The dyestuffs were generally similar to that used for identification of meat condemned for human consumption and were usually sufficiently similar to Naphthalene Green and like dyes to indicate the source of such samples. The problem of the presence of horse flesh is difficult if not impossible to prove convincingly by chemical tests, although certain examinations provide presumptive indications. Serological tests alone, can prove the point and then only with uncooked meats.

A number of cereal products proved to be sour and musty and generally out of condition. The inference to be drawn is that such goods are either old stock or have been stored under adverse conditions.

A sample of cheese was alleged to contain fragments of glass, but the offending objects were in fact, disodium hydrogen phosphate. This compound is used as an emulsifying agent to preserve flavour and promote stability of the cheese.

A survey was made of the condition of frying-oils in a number of the city's fish-and-chip saloons and it can be reported that satisfactory changing of the oil and the make-up oil were being made. A few samples of some age were showing evidence of undue free acidity, but there was no evidence of undue rancidity of oils. There seems little doubt that the trade does not take kindly to the use of palm-kernel oil for frying, and this also applies to a lesser extent to the use of dripping. For the best results arachis and similar oils are preferred, but are for the time being prohibitive in price and in short supply.

A portion of bacon was found to contain 0·15% of copper and the suggestion was made that this may have been derived from brass apparatus used in the injection of potassium nitrate.

Four dyestuffs were examined for suitability for drain-testing under varying conditions and colouring of effluents. All appear to be of value under differing conditions.

A number of estuary samples taken by the Chlorination Officer and ranging down river from Hotwells to Pill and out to the English and Welsh grounds and Flat Holm gave some interesting pollution data. This survey involved chemical and bacteriological examinations and as far as the laboratory was concerned, necessitated dissolved oxygen, temperature and salinity figures.

Some 30 flavourings, including peppermint, whiskey, raspberry and strawberry, were found to be in a very acid condition and with badly corroded caps. All were reported unfit and the stock from this source surrendered and destroyed. This type of commodity consists primarily of esters and since there may be a non-too-rapid sale of such products, there is a tendency for the esters to break down, giving acetic acid or similar organic acid, making the flavouring unpleasant and probably unsaleable.

A sample submitted by a private person consisted of a porous pot containing dark-coloured crystals. The individual probably imagined he had a real find, for the object was apparently dug up from his garden. The pot, however, was of common enough material whilst the contents consisted of potassium permanganate admixed with sand. The whole object was intended for use in the cistern of a lavatory and the idea was that each flushing would carry a small quantity of permanganate and thereby assist its disinfecting action. The idea is a worthy one, but the efficiency is doubtful.

Some tinned blackcurrants contained undue amounts of iron, which had rendered a pie prepared with the fruit, of most unappetising taste.

An egg-preservative consisted of a rubber-like compound dissolved in trichlorethylene. The preparation appeared satisfactory for the purpose, but a cautionary word must be made in using trichlorethylene near flames or even lighted cigarettes since there is a risk of the production of phosgene.

A lolly stick submitted for examination and comment bore a letter of the alphabet imprinted with ball-pen ink. The latter was unlikely to be conveyed to the ice lolly, but with other aspects of the matter we were less happy. The vendor of these lollies had conceived the idea of stimulating sales in somewhat unfavourable weather conditions. Thus when a customer had eaten a sufficient number of lollies he (or she) may be fortunate enough to make up a word from the letters upon the sticks. The rewards could suit the season, but on this occasion took the form of a free firework. It is apparent that the lolly sticks would suffer considerable handling and it appeared doubtful whether the sticks would be sterilised upon return to the vendor and it seemed that such sticks would certainly be used again.

Two fowls from a local hospital were found to be in satisfactory condition and in particular free from undue rancidity, whilst some marshmallow chocolate-creams possessed a somewhat unpleasant taste which was presumed to be caused by the presence of certain sporing organisms which had caused splitting of the fats.

Four preparations containing Vitamin A were examined on behalf of Southmead Hospital. Three were satisfactory whilst the fourth was almost completely devoid of Vitamin A.

PART V.—MISCELLANEOUS

3. Biochemical and Toxicological Examinations

It has become increasingly difficult to separate the specimens submitted under these classes and this year the groups are combined. Most of the 39 specimens were provided by the Regional Hospitals, including Frenchay, Ham Green, Southmead, the Children's Hospital, Bath and Cossham. Brief details of the examinations made for these hospitals are :—

M 111	Urine	No toxic substances were detected, but the urine contained traces of methylene blue.
M 221	Urine	Lead content normal at 0·05 mg per litre.
M 226	Hair	No evidence of arsenic.
227	Nails	
328	Human milk	Of satisfactory chemical composition.
331	Urine	Selenium 0·66 parts per million. 29th May.
400	Urine	Selenium 0·29 parts per million. 14th July.
473	Urine	Selenium 0·19 parts per million. 7th August.

Samples 331, 400, 473 related to the same patient and indicated the slow rate of excretion of selenium over two months. No cadmium was detected in M 331.

M 447	Urine	Lead 0·094 mg in 24 hours.	
448	Blood	Lead 0·06 mg per 100 ml.	
561	Urine	Lead less than 0·01 mg in 24 hours.	
750	Urine	No evidence of arsenic.	
751	Nail parings		
752	Hair clippings		
793	Urine	Lead 0·09 mg per litre	suggests lead poisoning.
794	Blood	Lead 1·2 mg per litre	
898	Blood	Lead 0·02 mg per 100 ml.	
902	Urine from a boy of 11 months	Mercury equivalent to 0·12 mg per 43 ml stated to be a 24 hour specimen. The normal excretion of mercury is stated to be 0·0005 to 0·001. The source indicates that any figure over 0·05 mg per litre is a diagnostic index of mercurial poisoning.	

Of the specimens not received from hospitals, a medicine was examined for the presence of " gammexane " with negative results, a second medicine consisted of light kaolin, some sweets were free from toxic substances but contained excessive flavouring and were of poor quality, whilst some cakes, alleged to have caused sickness, were free from toxic substances.

A sample of sugar alleged to cause frothing of tea was found, quite surprisingly to contain potassium tetroxalate. The presence of this compound was due either to a very stupid prank or a malicious attempt to cause inconvenience and illness to persons in a certain office.

In order to assist Dr. Davies, H.M. Government Medical Inspector of Factories, several urines were examined for selenium content. These were follow-up specimens to those examined in 1952, when selenium figures ranged from 0·02 to 1·3 parts per million. Considerable improvement was noted over the intervening few months and in all cases but one, the selenium was less than 0·02 parts per million. The remaining specimen contained 0·08 parts per million and was the second urine from the patient originally showing 1·3 parts per million. Excretion is obviously show. All patients had been removed from the selenium hazard after the first findings.

PART V.—MISCELLANEOUS

4.—District Sanitary Inspectors' Samples

65 Specimens were submitted and the following articles are selected for comment.

Canned gherkins in vinegar—of Dutch origin	The cans for this article were large and in consequence very liable to develop leaks at seams. The gherkins in several instances were in poor condition due to loss of sterility.
Sweet fruit wafers	There was no evidence of the presence of rancidity or of phenols but the wafers had a most objectionable soapy taste.
Chocolate Swiss Rolls and Jam Swiss Rolls	Not of first class quality but no exception could be taken in respect of the alleged unpleasant taste. There was some penetration of printing ink from the wrapper markings.
Canned Brisket of Beef	This sample was fit for consumption although the meat contained a somewhat undue excess of fat.
Slice of Bread	The foreign body present contained typical rodent hairs and coupled with the general appearance of the material was strongly indicative of rodent excreta.
Salad Cream Dutch produce	Severe breakdown of cream with badly rusted caps. Much rust was present in the cream.
Condensed Milk	Soapy and unpleasant taste. Sample definitely unsaleable.
Almond and Butter Biscuits	The biscuits were soft and damp and possessed an objectionable taste reminiscent of petrol.
Canned Peeled Tomatoes of Italian origin	Copper and tin contents not excessive but several "blown" cans.
Peeled Plum Tomatoes of Italian origin.	Bacteriologically sterile.
Pork Luncheon Meat of Danish origin	Not completely sterile. A few gram positive bacilli growing aerobically and anaerobically.
Fruit sauce	Marked signs of fermentation due to unipolar yeasts and whilst the product was not necessarily unfit, it would prove unsaleable.

Certain district sanitary inspectors' specimens, not foods, were submitted for information and guidance.

Samples of grit from Westbury-on-Trym	No unusual elements were found which might help in determining the source of the grit.
Insects from a three-piece suite	Larvae of moths with pupal cases and webbing and excreta.

Soil and grit samples	It was considered that the soot was probably from solid fuel fired ovens rather than from those which use oil fuel.
Insect	Dragon fly larva.
Insects	Identified as sheep ticks which are parasites living on the wool or fur of the host and from whom they suck blood. Ticks are not true insects but belong to the large division of animals known as Arthropoda.
Insect	Silver fish or Lepisma Saccharina.
Flies	Empid flies probably the tesselated Empis.
Lake Waters	St. George and Eastville lakes. The four samples submitted were heavily polluted. Both lakes were sampled at both inlet and outlet and it was strongly urged that neither lake should be adapted for paddling purposes.
Insect	Only the cast off skin of the insect. Identification not possible.
Insects	The common gnat or Culex pipiens. The female of the species alone is blood sucking but the species rarely does so in Britain.
Insects	Common clothes moth.
Insects	Gibbum psylloids, a European species of the Ptinidae family.
Grit	Identified as mainly tin slag.

PART V.—MISCELLANEOUS

5.—Atmospheric Pollution

This small section includes the monthly estimations made in the Avonmouth area for zinc and fluorine in the deposit gauges at T Farm and in the dock area. The findings will be referred to in the main section on Atmospheric Pollution.

6.—University Departments

Two samples of animal feed designated as normal and low in protein were submitted by the Pathology Department. The normal feed contained 21% of protein whilst the low-protein feed had only 0·07%.

A sample of brown sugar from the Physics Department of the University was found to be distinctly alkaline and the sugar in consequence possessed a marked astringent taste which made it most unpalatable.

7. Spectrophotometry

It will suffice here to summarise the miscellaneous samples which received particular attention from the spectrographic section.

Aspergillus niger	2
Polishing powder	1
Copper oxide	1
Iron ore	1
Tin ore	16
Samples for concentration method	12
Coal, ash, dust and coke	4

8.—Preventive Medicine Department

Of the 14 specimens examined the following are of interest. Four boxes of filter papers were examined for phenols and traces, less than 0·2 parts per million were found in three. It was suggested that even such traces might adversely affect the findings in the phosphatase test for milks.

Four samples of brine contained salt ranging from 24 to 29% and the pH values were 6·4 to 6·7.

A bacterial extract from the tubercle bacillis was found to contain 5·3% of moisture and 12·95% of nitrogen equivalent to 81% of protein (i.e. N x 6·25).

A portion of liver from a cow contained lead equivalent to 1·25 parts per million, an amount which did not suggest that the animal had suffered lead poisoning.

9.—Ministry of Food

The nineteen samples submitted included six of dried fruit and the remainder were eggs.

The dried fruit, currants from Greece and sultanas from Turkey, gave extract with petroleum either of the order of 0·1 to 0·3% and in consequence were passed as complying with the provisions of the Mineral Oil in Food Order.

The eggs appeared to be perfectly normal in all respects, although the washings from the eggs did show the presence of an oxidising agent which appeared to be mainly chlorine in very slight traces, 0·01 to 0·03 parts per million. This implied that the eggs may have been washed in dilute hypochlorite solution, but subsequent rinsing had been adequate and there would be little, if any, penetration into the egg.

Bristol Corporation Departments

10.—Town Clerk's Department

Only one sample, a paint stripper, required examination. This preparation was suggested for use in cleaning paint from the Cabot Statue at the Council House. It was agreed that the stripper might be of considerable use for surface paint but may fail to remove any paint which had penetrated the porous surfaces of the statue. A cautionary note was added to the report because one of the constituents of the preparation was the solvent, ethylene dichloride, which is toxic and might prove dangerous in confined spaces.

11. Central Purchasing Section (Town Clerk's Department)

The ten samples examined included one lead paint of satisfactory composition and a second lead paint deficient in red lead ; two mixed spices, a washing powder containing a sulphonated fatty alcohol soap and hexametaphosphate ; a spoon which had been unduly treated with sodium carbonate, three samples of cement and one of calcium carbide.

The cement specimens proved most interesting and were submitted as a result of a number of complaints from Corporation workmen engaged in mixing the cement for re-laying a roadway. The complaints were of an offensive smell when the cement was wetted, nose-bleeding, some stomach upset and one or two cases of rashes upon the forehead. The offending cement was of Westphalian (German) origin and the smell upon wetting was without doubt due to traces of phosphine PH_3, presumably resulting from the action of the water upon traces of phosphides in the cement. The normal sources of English cements caused no such troubles. Phosphine is closely related chemically to arsine, which has been known to cause nose-bleeding. Hence, although the literature on phosphine poisoning does not specifically mention this effect, it is apparently a possible symptom.

12. Port Health Section

212 samples were submitted and this represents a continuing rise in port sampling with each year since the end of the war. Most of the canned foodstuffs were eminently satisfactory in quality and free from metallic contamination. The quality of goods from South Africa and Australia is worthy of special praise. The following samples are worth brief comment either because of some unsatisfactory feature or point of interest.

Canned Plums	A number of samples contained hydrogen and in some instances carbon dioxide. " Hydrogen swells " are probably the lesser evil whereas the presence of carbon dioxide is indicative of decomposition.
Cherries in Sulphite solution	The sulphur dioxide content was 1600 parts per million against a permitted maximum of 3000 parts per million.
Superphosphate	This sample was alleged to cause nose bleed and conjunctivitis during handling. The only unusual feature was that fluoride content was 2·5% against 1·0% in a control specimen. It was difficult to assess that possible significance of this difference.
Seedless Raisins with carton packing	No evidence could be found to indicate damage by sea water.
Tea	Forty-two samples were examined for general quality. No unusual taint or flavour could be found although the infusions from five teas were flat and only mildly astringent.
Pure Jersey Cream Sterilised	Two samples contained the requisite minimum of 23% fat and there was no evidence of preservatives.
Milk Chocolate crumb	Correctly applied description.
Milk crumb	Not a true crumb, contained only 0·9% of fat.
Chocolate coverture	Correctly described.
Sausage seasonings	One sample contained spices, starch and 1·6% of sulphur dioxide. The second specimen consisted of 75% sodium pyrophosphate and 25% sodium meta phosphate and it was difficult to conceive of its use as a seasoning.
Edible Hog grease	This was passed for early disposal because of incipient rancidity.
Tomato puree	Three samples of South African origin contained slightly excessive amounts of copper of the order of 120 part per million on the dry basis. The present maximum permissible remains at 100 parts per million calculated on the dry basis.
Grain dust	This product contained very little oil or protein but an excessive amount of siliceous matter, and could not be recommended even for animal feeding.
Concentrated Pear Juice	This product of Swiss origin was supplied in aluminium drums which had leaked badly at the bungs. There was no evidence of aluminium in the syrup and the trace of sulphur dioxide was considered insufficient to implicate the juice as a cause of the leakage.

Mustard oil	This oil was stated to have been used by native seamen as a hair oil. This peculiar usage seemed most unlikely and it was discovered that the oil was in fact, required as an ingredient of curry. It appeared that the seamen were in great need of additional supplies of mustard oil for their curries and had quite simply thought of an additional, albeit fictitious, use in order to obtain the oil.
Portion of a Tea Chest ..	Growth of aspergillus.
Lead lining from the chest ..	Coated with basic lead carbonate.
Tea	Moisture 9·1%.
Canned Cherries of Italian origin	Two samples of a series of six submitted were "hydrogen swells" and contained iron up to 600 parts per million which gave the cherries a very unpleasant and astringent taste. All six samples were coated on the can ends with aluminium paint probably to mask external rusting. It was impossible to prevent fragments of the aluminium paint from entering the can upon opening up the products and this seems an undesirable contamination, although aluminium is not considered a particularly toxic metal.
Currants of Greek origin ..	Gave no evidence of preservatives or mineral oil.

13.—City Engineer

The majority of the 250 samples examined were soils or waters from various housing site and other works in the city, such as Highridge Common, Lockleaze, Clay Bottom, Henbury, Stockwood, the Northern Storm Water Tunnel, Rockingham Bridge and Withywood.

The examination required was for the presence of sulphur trioxide, and where this was found to be in excess of 0·25% there is a possibility that such soil may have deleterious effects upon cement foundation work. In certain cases sulphate-resisting cements may be necessary. Such cements are costly and difficult to work and hence are not recommended unless absolutely necessary. In the case of subsoil waters the critical figure for sulphur trioxide is 300 to 400 parts per million.

In the main, the position was satisfactory, although certain boreholes at the Withywood sites appeared likely to cause trouble.

The Parks Superintendent requested assistance in an attempt to find the cause of turf failures on two bowling greens. In one instance the soil was decidedly acid and marked improvement of the lawn occurred after liming. A contributing cause of the acidity was considered to be due to a possibly excessive peat dressing. In the second failure of the turf, no satisfactory explanation could be offered and it was suggested that the problem be referred to the Sports Turf Research Association.

An alleged sub-soil water from the Rockingham bridge area was found to be petrol. The matter was reported to the City Engineer, who advised the Esso Company whose storage tanks are close to the bridge.

14.—Port of Bristol

Six samples were examined, and included two paints, found in full agreement with specifications; two lubricating oils were free from metallic contamination and had no undue acidity.

A specimen of concrete contained a trace, 0·02%, of mineral oil but no tallow.

Some material skimmed from the water of the Floating Harbour was found to be tar and as a result the Breton captain of a French vessel was fined £3 for discharging tarry matter to the harbour.

15. Fire Brigade

As a result of the Assessors' findings and recommendations at the inquiry into the Ashley Road disaster there has been a marked tightening of the regulations relating to the Storage of Petroleum products. Hence all of the 14 samples submitted were examined for conformity with the Petrol Consolidation Act.

To give due publicity to the whole matter, proceedings were instituted in five cases. In four cases fines of £5 were inflicted, whilst in the fifth case the fine was £2 with 2 guineas costs.

A liquid taken from the scene of an outbreak of fire in a watch-repairer's premises in Gloucester Road, was found to have a flashpoint of less than 60° F. A youth was seriously burned when this fluid, used for watch cleaning, was accidentally spilled over an electric fire. The lad died later—a tragedy which certainly need never have occurred if those who handle inflammable solvents were fully alive to the attendant dangers.

A number of quick-drying primers and cements were also examined and whilst two primers flashed below 50° F., a later product flashing at 108° F. satisfied the regulations. A cement gave some trouble because the laboratory did not possess a flashpoint apparatus with a stirring arrangement. This difficulty is being remedied.

16.—Transport and Cleansing Department

13 samples were examined and of these six were pig concentrates. These are analysed for their ash, protein, fibre and water content. The range of figures, as percentages, were :—Ash 2·0 to 2·5, protein 4·5 to 6, fibre 1·5 to 2·3, and water 65 to 70.

Of the two samples ot lubricating oils, one proved too acid for use.

Two soils from the Netham site contain traces of arsenic : 5 and 15 parts per million respectively. These compare favourably with specimens examined in 1952 when as much as 3·8% was found.

A barley dust could not be recommended for incorporation in pig concentrate, because of a very high content of siliceous matter.

Two samples of petrol were compared and one was found to contain a contaminant strongly suggestive of paraffin.

17.—Rat Repression

A fowl which was alleged to have eaten rat bait was found to be egg-bound. Warfarin, a coumarin derivative, used as a most effective rodenticide, was not indicated since there was certainly no haemorrhage in the bird.

18.—Education Department

Three samples of floor oil were compared and recommendations made to assist in choosing the most appropriate. In particular, the products were examined for flashpoint, phenols, etc. Comment was made upon the rapid disintegration of crepe-rubber-soled footwear when used on oiled floors.

19. Baths Department

A specimen of salt from a consignment used for the regeneration of water-softeners was examined for water-content because of the rapidity with which the soaked product took up moisture. Salt with added magnesium carbonate to prevent this undesirable moistening and clogging, is perhaps desirable but is more expensive and probably not justified.

20.—Housing Department

The Housing-manager reported that failure of electric fires were occurring in the Council's houses. One of the elements from a fire was examined and it was found possible to simulate the damage to the element by passing a heavy current through the coil and shorting with a screwdriver or similar object—a dangerous prank for anyone to play. It was not considered likely that the damage had been caused by taking a light from the fire by means of a match or a spill of paper.

The remaining three specimens included some bed fluff which was found to contain the larvae of the clothes-moth and a portion of wood and part of a joist, both heavily attacked by fungi and algae. Cuprinol or creosote were suggested as preventive measures, although these could only be effective if adequate ventilation was provided to prevent the floor attaining such a state.

Gloucester County Council

Table 13.

Summary of Miscellaneous samples :—

Milk	5
Ice Cream	58
Ice Lolly	3
Trico Sludge	2
Quarry dusts and stone	7
Siftings	1
Ham	1
Lemonade	1
Bread	1
Soils and Sludge	28
Distilled Water	1
Atmospheric Pollution	24
	132

The five milks were submitted as of Channel Island quality and fully satisfied the minimum fat requirement for such milk.

The ice cream samples satisfied the requirements of the appropriate order. The fat-contents were particularly good and most contained over 10%. The lowest recorded fat was 5·9%, with eight other specimens between 7 and 10%—a very favourable state of affairs.

The three ice lollies were of reasonable composition and free from metallic contamination. One of the samples contained 3·5% of fat and was one of the hybrid ice lolly-ice cream combinations which gained considerable popularity during the year. Definitions and standards of composition with adequate manufacturing control seem very desirable for these commodities.

The two samples of trico sludge were examined for the presence of trichlorethylene. The first sample indicated 23% whilst a second sample after treatment gave only 3%.

The quarry dusts and stone specimens were submitted in connection with a survey of an area around a quarry and the object was to identify the dusts as coming from such workings and to assess the degree of deposition, which was in fact extremely heavy having regard to the short exposure periods of the Petri dishes.

The siftings, taken from a footpath in the Dursley area, contained sulphur bacteria which were producing an offensive smell.

The portion of ham had a somewhat unusual taste which was considered to be due, probably, to excessive smoking of the meat.

The lemonade in bottle contained fragments of suspended matter which were shown to be portions of the badly worn screw stopper.

The bread contained a portion of foreign matter which proved to be a piece of dirty dough.

The soil and sludge samples came from the sites of two County Schools and were examined for the presence of sulphates which might have deleterious effects on cement work. Of the 28 specimens, four contained sulphates in excess of 0·25% as SO_3 and two were borderline cases.

The distilled water taken from a garage, was suspected to contain tap water and there were strong indications in support of this. The matter was to be followed up with samples taken under the provisions of the Merchandise Marks Act.

The atmospheric pollution, lead peroxide specimens, are in continuation of the survey begun in 1952 in relation to pollution in the Hallen area.

PART VI.—POISONS AND PHARMACY ACT, 1933

14 specimens were considered for compliance with the Act and the following comments were made :—

P & P 1. *Strong Household Ammonia*

This product contained 19·6% of ammonia against a declared 20%. The labelling of the product was satisfactory. The product is a Part II poison.

P & P 2. *Cloudy Ammonia*

This product contained 14·3% w/w of ammonia against a declared 15%, and again the labelling was satisfactory. The product is a Part II poison.

P & P 3. *Household Ammonia*

This product contained 4·1% w/w of ammonia and, being less than 5%, is exempt from the provisions applied to poisons in Part II of the Poisons List. The product was carefully labelled and appeared to contain a trace of colouring probably ultra marine.

P & P 4. *Carpet Cleaner*

This product was an aqueous solution of a sulphonated fatty alcohol soap, and assessed upon this active principle, it was of moderate quality and would represent in strength a threefold dilution of a product akin to Teepol. The product does not come within the provisions of the Act.

P & P 5. *Fabric Cleaner*

This product had the characteristics of pure carbon tetrachloride which is well recognised as a substance suitable for cleaning fabrics. The product does not come within the provisions of the Act.

P & P 6. *Disinfecting Fluid*

This product contained 37·6% v/v of phenols against a declared 40%. This is a Part II poison.

P & P 7. *Disinfecting Fluid*

This product contained 31·9% v/v of phenols against a declared 31%. This is a Part II poison.

P & P 8. *Sanitary Fluid*

This product contained 15% v/v of cresols. The declared content was 16 to 18% v/v as phenols. This is a Part II poison.

P & P 9. *Disinfectant*

This product contained 10% v/v phenols against a declared 10 to 15% v/v and is a Part II poison.

P & P 10. *Disinfectant*

This product contained 12% v/v phenols against a declared 12 to 16% v/v and is a Part II poison.

P & P 11. *Household Ammonia*

This product contained 4·1% w/w of ammonia against a declared 5% w/w and is exempt from provisions applying to Part II poisons.

P & P 12. *Household Ammonia*

This product contained 11·9% w/w of ammonia against a declared 15% w/w and is a Part II poison.

P & P 13. *Liquid Ammonia* 880

This product contained only 4·25% w/w of Ammonia. 880 Ammonia should contain not less than 30% w/w of ammonia and would then be a Part II poison.

P & P 14. *Liquid Ammonia*

This product refers to P & P 13 and contained a similar amount of ammonia 4·25% w/w. The product was therefore incorrectly labelled. 880 Ammonia is a Part II poison which must be handled with great care. Ammonia solutions containing less than 5% w/w of ammonia can be sold freely and are nothing like as dangerous as the 880 product. Incidentally " 880 " refers to the specific gravity, i.e. 0·880.

PART VII.—ATMOSPHERIC POLLUTION

The table summarises recordings made in relation to pollution problems :—

Table 14

Deposit Gauges	84
Lead peroxide for sulphur dioxide	132
Continuous smoke and sulphur dioxide	266
Zinc and fluorine determinations	22
Phosphorus and silica	36
	540

The City

The three city stations, Water Works, Shaftesbury Crusade and the Zoological Gardens, together with the rural control at Blaise Castle, were fully operative throughout the year.

The degree of pollution is measured by collection of the rainfall each month from each site and the analysis of this rain water for soluble, insoluble and tarry matters together with determinations of calcium, chloride, sulphate and pH. Each collecting-bowl is of known area and each feeds the falling rain into a bottle of some 10 litres capacity. At periods of heavy rain it is necessary to inspect each site usually at mid month or as dictated by weather conditions.

Table 15

	Rain in ins.	*Total Deposit Tons per sq. mile*	*Range of SO_3 in mgms per 100 sq. cm. per day*
Shaftesbury Crusade, St. Phillip's	26·29	252·6	1·26 to 3.98
Waterworks Office, Marsh Street	27·95	257·5	1·03 to 3·36
Zoological Gardens	32·09	124·3	0·04 to 1·86
Blaise Castle	27·50	105·1	0·09 to 2·58

The rainfall throughout the year was generally low and some 5 inches less than in 1952. The levels of pollution at Shaftesbury Crusade and the Waterworks are both slightly up on the 1952 figures, whilst at the Zoo and Blaise Castle there was an appreciable drop in both tonnage figures by some 33 tons at the Zoo and 17 tons at Blaise. The level of sulphur-dioxide pollution remained much the same at Shaftesbury and the Waterworks but the range of pollution at the Zoo and Blaise widened in the year under review. Thus it will be noted that at both sites the SO_3 figures reached a maximum of 1·86 and 2·58 respectively. It becomes increasingly apparent that there is a considerable drift of sulphur gases from the Lawrence Weston area as shown particularly by the SO_3 figures for the winter months at the Blaise site. The Zoological Gardens site would also indicate that, broadly speaking, the deposit nuisance is lessening although sulphur pollution has increased a little. The overall position remains as in 1952, that is, the domestic fire and industry in Bristol continue about equally responsible for pollution troubles.

Continuous Smoke and Sulphur Dioxide Recordings

Records were kept on 266 days of the year and the smoke filters were, until 1951, submitted to the Medical Research Council. For continuity, and in order to have some record of pollution of the air around Canynge Hall and in particular from the traffic passing in the Whiteladies Road, the apparatus has been kept in operation. The air from outside the laboratory at second-floor level is drawn through a small inverted funnel and thence across a 1-inch diameter Whatman filter paper. This serves to trap the smoke particles and the filtered air passes to a trap containing diluted hydrogen peroxide which collects the sulphur gases with the formation of sulphuric acid. The volume of air is metered, some 60 cubic feet per day, and suction is maintained by either a small electric motor or by water pressure. The findings of Sir Ernest Kennaway, working at St. Bartholomew's Hospital, London, as a result of examining the monthly smoke-filter stains from several large cities, are contained in the *British Journal of Cancer*, Volume VI, pp. 1, 8 and 22.

The Avonmouth Survey

Three sites are maintained in this area, at the Docks, " T " Farm and Green Splot Farm. All are equipped to record the monthly sulphur pollution, whilst at the first and second sites the rainfall is collected in the usual gauges, but the collected water is examined with particular reference to the zinc and fluorine pollution of the area. It has never been considered that such examinations are the best method of attacking this problem, for obviously the air of the neighbourhood should, for absolute measurement, be drawn through a suitable absorption train as was in fact done in the survey at a cryolite works in Scotland (" Industrial Fluorosis "). The sulphur trioxide figures appear in Table 17 and the information on Zinc and Fluorine in Table 18.

The Portishead Survey

The Tables 16 and 17 indicate the deposit of rain, sulphur trioxide and the phosphorus and silica figures for the area. The comparative figures over the five years of observation are in Table 20. The results obtained at South Road and the Meadow Farm Sites are fairly steady, but the Portishead Dock figure has risen very considerably from 284·6 tons for 10 months in 1952 to 506·8 tons for 10 months in 1953. Indeed the latter figure is compared with the 1949 and 1950 deposits. The peak depositions were in July, 70·1 tons, and August, 111·2 tons per square mile at the Dock Site. Closer examination of the results of July and August indicated that of the 70 tons, 5·7 tons were water-insoluble matter, and of this 47 tons represented ash. The comparable figures relative to the 111·2 tons were 98·7 tons of water or soluble matter and 73·5 tons as ash. No explanation could be given for the unusually heavy summer depositions. The South Road site showed no unusual fluctuations, but there is one unexplained result for Meadow Farm in April, when the deposit was 30·8 tons. Of this figure there was 16·2 tons of soluble sulphate as SO_4'' and 7·6 tons of calcium as Ca^{++}. Such figures rather suggest that the gauge had been tampered with.

The silica-phosphorus survey indicates almost negligible deposits at South Road and Meadow Farm sites, although the Insoluble SiO_2 figures at South Road are distinctly higher than at the Meadow Farm site. As would be expected, the insoluble SiO_2 at the Dock Site are appreciable and indeed rose steadily from 4·3 tons in May to 60 tons in June. This was followed by a fall to 9 tons in November. There was also a peak amount of 16·8 tons in February.

Table 16

Deposit in tons per sq. mile	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Waterworks	19·8	17·2	29·5	28·7	14·2	21·0	21·8	25·9	25·6	21·4	16·4	16·0	257·5
Shaftesbury Crusade	17·9	17·1	20·1	25·6	13·9	16·1	14·4	33·9	24·5	27·3	21·6	20·2	252·6
Zoological Gardens	9·3	11·1	12·7	12·9	7·3	8·9	8·0	13·1	13·8	11·3	7·7	8·2	124·3
Blaise Gardens	6·1	7·1	9·9	12·1	5·7	N.A.	19·6	15·2	10·5	7·70	5·4	5·0	105·1
Meadow Farm	4·6	5·4	7·6	30·8	5·3	5·5	4·5	5·5	3·4	4·0	2·8	4·9	84·3
South Road	10·2	19·1	17·8	16·8	21·7	12·6	12·9	20·0	48·1	16·9	13·9	27·5	237·5
Portishead Docks	29·0	44·7	39·9	Lost	22·7	42·9	70·1	111·2	59·6	33·7	27·2	25·8	506·8
Rain in inches													
Waterworks	0·70	1·56	0·84	3·22	1·82	1·40	4·58	5·49	3·25	3·19	1·12	0·78	27·95
Shaftesbury Crusade	0·77	1·41	0·91	2·77	1·73	1·39	4·46	5·00	3·23	2·67	1·13	0·82	26·29
Zoological Gardens	0·87	1·97	1·18	3·53	2·09	1·70	4·81	5·87	3·66	3·79	1·57	1·05	32·09
Blaise Castle	0·84	1·62	1·41	3·45	1·94	N.A.	3·55	5·75	2·77	3·40	1·57	1·20	27·50
Meadow Farm	0·67	1·60	1·55	3·57	2·23	1·66	3·73	5·54	3·52	3·93	1·86	1·34	31·20
South Road	0·67	1·59	1·01	3·51	1·06	1·33	3·56	5·48	2·82	3·59	1·57	1·46	27·65
Portishead Docks	0·72	1·39	1·55	3·40	1·91	1·08	4·02	5·34	2·94	3·46	1·55	1·24	28·60

Table 17

Sulphur Trioxide

Mgm per 100 sq. cm. per day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Waterworks Co.	3·36	3·25	3·26	2·31	1·16	0·93	1·22	1·71	1·03	2·58	2·39	2·78
Shaftesbury Crusade	3·47	3·31	3·26	2·18	1·83	1·26	1·65	1·48	1·65	3·31	3·98	3·34
Zoo	1·44	1·10	1·86	0·50	0·41	0·19	0·04	0·09	0·25	1·02	0·56	1·44
Blaise Castle	1·23	2·48	2·58	0·78	0·52	0·09	0·19	0·60	0·20	1·15	0·76	1·54
T Farm	1·54	1·38	1·59	0·54	0·41	0·54	0·67	0·29	0·30	1·18	0·34	1·48
Green Splot	1·44	1·48	1·26	0·98	0·62	0·09	0·75	0·82	0·50	0·76	1·73	1·70
Avonmouth	2·07	2·89	8·26	4·14	2·78	2·48	2·46	1·96	2·33	2·02	Lost	Out of Commission
South Road	0·65	0·62	1·20	0·98	0·30	0·09	0·40	0·24	0·03	0·49	0·21	0·95
Down Road	1·80	0·58	1·31	0·42	0·30	0·19	0·17	0·14	0·03	0·58	0·18	0·73
Portishead Dock	1·23	0·99	1·65	0·70	0·41	0·25	0·48	0·45	0·42	0·79	0·33	0·95
Power Station	1·13	1·35	1·31	0·48	0·19	0·25	0·09	0·09	0·03	0·58	1·29	0·71

Table 18

			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
AVONMOUTH DOCK		No.	M81	M163	M290	M292	M334	M393	M455	M589	M669	M802	M956	M34
	Zinc	Mgrms.	280	210	750	219	248	262	67	16·7	16·8	26·5	5·0	18·0
		Tons/Sq. Mile	9·73	7·30	26·06	7·61	8·62	9·10	2·33	0·57	0·57	0·91	0·17	0·62
	Fluorine	Mgrms.	2·34	2·39	11·16	7·14	6·63	3·33	2·55	8·52	3·62	5·20	1·08	5·95
		Tons/Sq. Mile	0·081	0·83	0·388	0·48	0·230	0·116	0·089	0·298	0·124	0·18	0·037	0·204
		Rainfall ..	0·75	1·50	1·34	3·33	1·77	1·34	2·68	5·29	2·38	3·70	1·20	1·06
T FARM		No.	M82	M164	M291	M293	M335	M394	M456	M590	M670	M803	M957	M35
	Zinc	Mgrms.	70	67·5	75	35	21	37·5	5	3·1	Not Available	3·0	1·5	6·51
		Tons/Sq. Mile	2·41	2·32	2·58	1·20	0·72	1·29	0·17	0·11		0·10	0·05	0·22
	Fluorine	Mgrms.	1·14	1·94	1·13	1·31	0·62	1·26	1·15	1·20		1·49	0·64	0·83
		Tons/Sq. Mile	0·039	0·067	0·039	0·045	0·04	0·043	0·04	0·041		0·051	0·022	0·029
		Rainfall ..	0·74	1·33	1·22	3·40	1·75	1·33	2·40	5·32		3·19	1·18	1·17

Table 19

Silica and Phosphorus

TONS PER SQ. MILE		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Portishead Dock	Soluble SiO_2	Trace	0·16	0·16	0·33	0·40	0·40	0·43	0·37	0·40	0·19	0·10	0·10
	Insoluble SiO_2	9·43	16·83	12·80	N.A.	4·29	17·18	28·32	60·06	17·33	11·16	9·06	10·60
	Soluble P_2O_5	0·01	0·02	0·01	0·03	0·04	0·02	0·04	0·07	0·04	0·04	0·01	Trace
	Insoluble P_2O_5	0·03	0·07	0·04	N.A.	0·04	0·04	0·03	0·02	0·04	0·06	0·05	0·03
Meadows	Soluble SiO_2	Trace	Trace	0·10	Trace	Trace	Trace	Trace	Trace	Trace	Trace	0·10	0·05
	Insoluble SiO_2	0·59	0·85	0·86	0·79	0·91	0·80	0·32	0·42	0·20	0·54	0·23	0·82
	Soluble P_2O_5	0·01	0·02	Trace	0·02	0·02	0·01	0·01	0·06	0·01	0·01	0·06	Trace
	Insoluble P_2O_5	0·01	0·01	0·003	0·02	0·02	0·01	0·01	0·02	0·02	0·04	0·03	0·03
South Road	Soluble SiO_2	Trace	Trace	0·14	Trace	0·11	0·06	Trace	Trace	Trace	Trace	Trace	0·04
	Insoluble SiO_2	2·59	4·15	3·38	3·24	6·68	2·83	2·74	2·77	N.A.	2·27	4·23	4·40
	Soluble P_2O_5	0·003	0·01	0·10	0·03	0·04	0·02	0·03	0·03	0·03	0·05	Trace	Trace
	Insoluble P_2O_5	0·02	0·01	0·04	0·01	0·02	0·04	0·03	0·03	0·04	0·04	0·04	0·06

Table 20

	Rainfall in inches					Total Deposit. Tons per sq. mile				
	1953	1952	1951	1950	1949	**1953**	1952	1951	1950	1949
Portishead Dock ..	**28·6**	22·0 10 mths	30·8	35·7	26·0	**506·8** **11 mths**	284·6 10 mths	303·2	530·3	538·8
Meadow Farm ..	**31·2**	34·6	36·7	36·1	23·9	**84·3**	91·4	82·8	116·9	73·8
South Road	**27·6**	34·2	29·4 10 mths	—	—	**237·5**	214·2	178·1 10 mths	—	—

PART VIII.—SPECTROPHOTOMETRY

A total of 349 samples was examined by the section during the year, and in a great many of these the spectrophotometric examination was in addition to an extended chemical examination.

The work can be considered under three headings :—

(*a*) Quantitative Analysis ;
(*b*) Qualitative Analysis ;
(*c*) Research problems.

(a) Quantitative Analysis

127 samples of foodstuffs were examined for the presence of excessive amounts of dangerous metals, notably lead and tin. They were of a very diverse character—ranging from soft drinks and ice lollies to canned fish and curry powder, and in the majority of cases the amounts of metals found were not considered excessive.

(b) Qualitative Analysis

The Spectrograph was used in 138 samples of all types to give information of a qualitative nature to supplement, or in some cases, to obviate further chemical work.

The type of information obtained is illustrated by the following selected cases :—

A sludge from a stream in the city was found to contain titanium oxide, identifying it beyond doubt with the effluent from a paint works which was responsible for pollution of the watercourse.

The turf from a bowling green which developed bare patches was examined for the presence of metallic contamination likely to have caused the death of the grass.

A sample of cement which was suspected of having caused illness in workmen showed the presence of phosphorus compounds and confirmed the suggestion arising from chemical evidence that phosphine was probably responsible.

The soil from a tip at Netham, which it was proposed to convert into a playing field, was examined in order to pronounce on its suitability. This was most necessary, since the site had formerly been used for chemical manufacturing processes, and other sites in the vicinity had shown the presence of toxic elements.

The identification of a dust collected from some houses with that arising from a stone quarry indicated the origin of the atmospheric pollution in a locality at Chipping Sodbury.

In addition, 39 samples were submitted from other University Departments, a large proportion of these being specimens examined for an investigation of improved methods of separating tin slimes.

(c) Research

Spectrographic methods, while being extremely valuable for certain aspects of the work of the department are by no means so fully established as to be capable of replacing some of the tedious chemical operations, and a great deal of research has been carried out in order to improve them.

This research has been directed among other things, to the investigation of suitable internal standards for the determination of traces of toxic metals, the elimination of the influence of the alkali metals, and to concentration techniques for the preparation of the sample prior to spectrographic examination.

The behaviour of the photographic plate used for recording spectra has been investigated very fully, particularly with regard to working at lower densities, and a function which is linear at all densities and at all wavelengths has been evolved.

Tables of this function have been completed and are used for the correction of densities.

PART IX.—OTHER ACTIVITIES

This section includes lectures, visits and work of a consultative nature.

Lectures were given to the following organisations :—

> The Redland, Stapleton and Stoke Bishop Townswomen's Guilds, the University Settlement at Barton Hill, the Youth Hostels Association at the Folk House, the West of England Science Teachers Association, the Society of Dairy Technology and, finally, to the men at the Falfield Prison.

The Diploma in Public Health course, which was commenced in 1952, continued in 1953 and covered twenty lectures on the work of the Department, whilst Mr. Dembrey gave a series of lectures to the Student Technicians on the more technical aspects of our work.

The members of the Weights and Measures Committee of the Gloucester County Council visited the laboratory in March and members of the Bristol Health Committee were entertained in December. The Food and Drug Inspectors of Bristol were also entertained after informal discussions upon mutual problems and difficulties, and I visited Gloucester to discuss like matters with the County Inspectors.

I was also privileged to attend two conferences on Atmospheric Pollution matters in May and November, both in London ; a meeting of the Association of Public Analysts to discuss the provisions of the new Food and Drug Bill ; a refresher Course for Technical Reconnaissance Officers (Civil Defence) at the University, and the Symposium on Smoke held at the University in October.

Other meetings included the usual Quarterly meeting of the Gloucester County Weights and Measures Committee, and discussions upon a possible F.R.I.C. Branch E Course to be held at the College of Technology ; the acquisition of new apparatus for the laboratory and, finally, the pollution of the River Avon.

There were seven visits to the laboratory, involving some 70 persons, and these included health visitors, district nurses, students of the Geology Department, student nurses and student sanitary inspectors.

The seven attendances at Court involved principally milk and petrol cases.

The docks office made enquiries concerning a variety of chemicals, principally as to handling and methods of storage. Information was given on the following commodities :—Diatomaceous earth, meta bisulphate crystals, zinc spelter, carbide of strontia, strontium carbonate and alpha-pinene.

Advice was also given concerning the use of flame-guns for the destruction of infected carcases ; a soil submitted by the Department of Education, University of Bristol ; rutile and zircon, both used in the manufacture of glass, and finally the deep freezing of garden peas.

PORT HEALTH SERVICES

MEDICAL INSPECTION AND SANITARY CIRCUMSTANCES

By
Dr. D. T. Richards
Senior Medical Officer (Port)

* * *

This report is prepared on the lines indicated in the revised memorandum, Form Port 20, issued by the Ministry of Health to Port Health Authorities.

PORT HEALTH SERVICES

Medical Inspection and Sanitary Circumstances

by Dr. D. T. Richards (*Senior Medical Officer—Port*)

SECTION I

Staff

No changes have occurred during the year.

SECTION II

Amount of Shipping Entering the District During the Year

The port has experienced a year of satisfactory and continuous activity. The Government relinquished control of many commodities, including animal feeding stuffs, during the period under review, with the result that shipments of this material at 276,000 tons were 143,000 tons more than in the previous year. This was one of the chief factors responsible for the increase both in the number of foreign-going arrivals and the total tonnage of imports handled. These, as the accompanying table shows, are substantially above those for 1952.

Year	Vessels normally trading		Tonnage of	
	Foreign	Coastwise	Imports	Exports
1950	1,118	7,877	2,932,234	110,869
1951	1,280	8,911	3,439,379	168,847
1952	1,020	8,504	2,806,634	88,602
1953	1,247	8,757	3,062,276	75,791

The new artificial fertilizer factory under construction at Portishead Dock is nearing completion. The first foreign bulk shipment of phosphates was discharged at the reconstructed quayside berth adjacent to the factory in October. This inaugurates a schedule of shipments which, when the plant is working to full capacity, is expected to increase to at least three every fortnight. As the products of this industry are in continuous demand there is every reason to believe that Portishead Dock will play an increasingly important part in the shipping trade of the Port of Bristol.

Table B

Amount of Shipping Entering the District During the Year

Ships from	Number*	Tonnage*	Number inspected		No. of ships reported as having or having had during the voyage infectious disease on board†
			by the Medical Officer of Health	by the Sanitary Inspcctor	
Foreign ports	1,247	3,449,772	528	1,313	9
Coastwise	5,243	1,562,990	—	862	—
Total	6,490	5,012,762	528	2,175	9

* Figures supplied by courtesy of the Port of Bristol Authority. (Discrepancy between number of vessels shown as arriving and number inspected in foreign section arises from differing classification of " Foreign " and " Coastwise " vessels as applied by the Port of Bristol Authority and the Bristol Port Health Authority).

† Excluding vessels having venereal disease on board.

Table C (a)

Passenger Traffic

		Seaport	Airport
Inwards	British	2,151	208
	Alien	155	133
Outwards	British	1,740	156
	Alien	128	85

Table C (b)

Cargo Traffic

Principal Imports

Commodities	*Tons*
Cocoa	22,639
Feeding Stuffs for Livestock	276,095
Fertilisers	157,921
Flour and other Cereal Products	31,479

Table C (b)—*Cont.*

Commodities	*Tons*
Fruit:	
Bananas	55,006
Citrus	10,657
Dried	18,970
Other Kinds	9,996
Grain:	
Barley	277,778
Maize	181,634
Wheat	435,429
Other Kinds	16,861
Metals:	
Aluminium	34,656
Copper	15,924
Iron and Steel	15,370
Other Kinds	9,478
Molasses	46,315
Oilseeds and Oilnuts	33,845
Ores	109,597
Paper	22,641
Petroleum:	
Spirit	393,166
Other Kinds	401,816
Provisions:	
Butter	21,495
Cheese	11,939
Meat:	
Bacon and Ham	550
Cann, etc.	5,485
Frozen	40,320
Irish Chilled	10,760
Sugar	63,103
Tea	5,349
Timber:	
Hewn, Sawn and Prepared	127,332
Tobacco	41,767
Wines and Spirits	8,070
Woodpulp	90,575
Other Kinds	69,018
Total Foreign Imports	3,073,036

Principal Exports

Buildings, Prefabricated	1,274
Carbon Black	1,079
Cement	11
Chemicals	1,430
Clay	11,095
Cocoa	2,467
Coke	2,381
Iron and Steel	13,150

Table C (b)—*Cont.*

Commodities	*Tons*
Motor Cars and Parts	7,215
Painters' Colours	422
Paper	329
Petroleum	2,990
Strontia	4,342
Other Goods	27,606
Total Foreign Exports	75,791

Note: Figures supplied by courtesy of Port of Bristol Authority.

Table C (c)

Principal Ports from which Ships arrive

Country	*Ports*
Algeria	Algiers, Mostaganem.
Argentina	Buenos Aires, Rosario.
Australia	Adelaide, Freemantle, Geelong, Hobart, Melbourne, Port Kembla, Port Pirie, Sydney.
Belgian Congo.	Matadi.
Belgium	Antwerp, Ghent.
Bermudas Is.	
British North Borneo	Rejanz.
British West Indies	Bowden, Kingstown, Montego Bay, Oracabessa, Port Antonio, St. Kitts, Trinidad.
Burma	Akyab, Rangoon.
Canada	Botwood, Halifax, Montreal, New Westminster, Port Alberni, Port Alfred, Port Churchill, Quebec, St. John, Three Rivers, Vancouver.
Canary Islands	Madeira.
Ceylon	Colombo.
Chile	Coronel, Tocopilla.
China	Dairen, Taku.
Cuba	Cienfuegos, Havanna.
Cyprus	Famagusta, Limassol.
Cyrenaica	Tripoli.
Denmark	Copenhagen, Frederikssund.
Dominica	Roseau.
Egypt	Alexandria.
Eire	Cork, Dublin, Limerick.
Finland	Abo, Hamina, Hango, Haukipudas, Helsingfors, Kotka.
France	Bayonne, Bordeaux, Deauville, Dieppe, Dunkirk, Havre, La Rochelle, L'Orient, Marseilles, Nantes, Nemours, Rouen, Tonnay-Charente.
French Cameroons	Tiko Island.
French Equatorial Africa	Dakar, Grand Bassam, Libreville, Monrovia, Port Gentil.
Gambia	Bathurst.
Germany	Bremen, Bremerhaven, Emden, Friedrichshaven, Hamburg, Harborg, Stettin, Wismar.
Gold Coast	Accra, Freetown, Gambia, Takoradi.

Table C (c)—*Cont.*

Country	*Ports*
Greece	Patras, Zante.
Hong Kong ...	
India Union	Bombay, Calcutta, Vizagapatam.
Indonesia	Sourabaya.
Iran	Basra.
Iraq	Fau.
Israel	Haifa.
Italy	Genoa, Liverno, Napoli, Palermo.
Japan	Kobe, Yokohama
Jugoslavia	Rijeka, Split
Kenya	Mombassa
Kuwait	Mena al Ahmadi
Malaya	Port Swetenham, Singapore.
Mexico	Corral, Tampico
Morocco	Casablanca, Saffi, Sousse.
Mozambique ...	Beira, Mozambique.
Netherlands	Amsterdam, Delfzyl, Dordrecht, Rotterdam.
Netherlands West Indies	Aruba, Curaçao.
New Zealand ...	Auckland, Bluff, Port Chalmera, Lyttleton, New Plymouth, Otaru, Napier, Timaru, Wellington.
Nigeria	Lagos, Port Harcourt, Sapele.
Norway	Bergen, Oslo, Risor, Skein, Stavanger, Tredestrand.
Pakistan	Chittagong, Karachi.
Panama	
Persian Gulf ...	Bahrein Is., Ras Tanura.
Peru	Callao.
Portugal	Lisbon, Oporto.
Puerto Rico ...	San Juan.
Rumania	Constanza.
Siam	Kohsichang.
South West Africa ...	Walvis Bay.
Spain	Barcelona, Cadiz, Huelva, Seville, Valencia.
Sudan	Port Sudan.
Sweden	Gelfe, Gothenburg, Iggesund, Kramfors, Malmo, Nyhammar, Stockholm, Sundsvall.
Syria	Lattakia.
Tanganyika	Dar es Salaam, Zanzibar.
Tunisia	Sfax, Tunis.
Turkey	Iskanderun, Istanbul.
Uruguay	Puerto la Cruz, Montevideo.
Union of South Africa	Cape Town, Durban, East London.
Union of Soviet Socialist Republics	Igarka, Kherson, Novorossisk, Odessa.
United States of America	Baltimore, Baton Rouge, Baytown, Beaumont, Boston, Freeport, Galveston, Houston, Los Angeles, New Orleans, New York, Norfolk, Philadelphia, Port Sulphur, San Francisco, Texas City, Wilmington.
Venezuela	Punta Cardon.

SECTION IV

Inland Barge Traffic

Number of craft entering during the year:	3,514
Tonnage of craft entering during the year:	315,139

Places served by the traffic:

Banbury
Barry
Bridgwater
Cardiff
Frampton
Gloucester
Lydney
Newport
Sharpness
Stourport
Swansea
Upton
Worcester

SECTION V

Water Supply

No changes have occurred during the year.

SECTION VI

Public Health (Ships) Regulations, 1952

No changes have occurred during the year.

SECTION VII

Smallpox

(1). *Name of Isolation Hospital to which smallpox cases are sent from the district.*

Cases and suspected cases of smallpox occurring within the district are sent to the smallpox wing of the Ham Green Infectious Diseases Hospital, near Bristol.

(2). *Arrangements for transport of such cases to that hospital by ambulance, giving the name of the Authority responsible for the ambulance and the vaccinal state of the ambulance crews.*

These arrangements are carried out under supervision by the ambulance service of the Bristol Corporation which is administered by the Medical Officer of Health. The vaccinal state of the ambulance crews is satisfactory and subject to continuous review.

(3). *Names of smallpox consultants available.*
- (a) Dr. I. MacRae, Medical Superintendent, Ham Green Hospital, Pill, Near Bristol.
- (b) Dr. R. Clarke, O.B.E., Harley Lodge, Clifton Down, Bristol.

(4). *Facilities for laboratory diagnosis of smallpox.*

The Preventive Medicine Laboratories (University of Bristol) carry out all necessary tests in this connection.

SECTION VIII

Venereal Disease

Information as to the location, days and hours of the available facilities for the diagnosis and treatment of venereal disease among merchant seamen under international arrangements, including in-patient treatment and the steps taken to make these facilities known to seamen.

The following table relates to seamen treated at the Avonmouth Centre during the post-war period. It will be seen that the incidence of the various conditions treated during 1953 closely resembles the pattern for previous years, but that there has been a considerable decline in the incidence of syphilis amongst merchant seamen. This decline is progressive and is to a large extent due to the use of penicillin in the treatment of this disease.

Year	*Syphilis*	*Chancroid*	*Gonorrhoea*	*Non V.D.*	*Total*
1946	67	27	254	291	639
1947	60	17	271	252	600
1948	77	20	298	179	574
1949	93	19	260	240	612
1950	62	13	226	226	518
1951	39	17	180	284	520
1952	29	20	196	223	468
1953	**26**	**6**	**142**	**283**	**457**

Penicillin is still in many cases being used in a most indiscriminate manner both in the merchant service and in some of the smaller foreign ports, and cases of clinically atypical syphilis, further obscured by negative or doubtful serological findings, are now being observed amongst seafarers seeking treatment.

SECTION IX

Cases of Notifiable and Other Infectious Diseases on Ships

No incidents of outstanding interest occurred during the year, and the attached table D is self-explanatory.

Table D

Cases of Notifiable and Other Infectious Diseases on Ships

Disease	Category and number of cases during the year							Number of ships concerned
	Cases landed from ships from foreign ports		Cases which have occurred on ships from foreign ports but have been disposed of before arrival		Cases landed from other ships		Total	
	Pass.	Crew	Pass.	Crew	Pass.	Crew		
Malaria ...	—	—	—	10	—	—	10	4
Pneumonia ...	—	1	—	—	—	—	1	1
Pul. T.B. ...	—	3	—	1	—	—	4	4
Totals ...	—	4	—	11	—	—	15	9

SECTION X

Observations on the Occurence of Malaria in Ships

4th February.

m.v. *Burutu Palm*, ex West Africa.

Three members of the crew of this vessel developed malaria 1st, 15th and 25th January respectively. They were all treated at sea with Paludrine and had recovered on arrival.

15th April.

s.s. *Astronomer*, ex Mombasa (20.1.54).

A member of the crew of this vessel sickened with Malaria whilst the vessel was in dock at Mombasa. He was transferred to the shore hospital for three days and was then recovered sufficiently to rejoin his ship.

30th November.

m.v. *Wayfarer*, ex Tanga (29.10.53).

Three members of the crew developed malaria 5th and 8th November. The early case occurred whilst the vessel was in dock at Mombasa and was transferred to the shore hospital there. The two other cases occurred at sea, and had recovered on arrival.

12th December.

m.v. *Halland*, ex West Africa.

Three members of the crew sickened between 20th November—3rd December. One case occurred whilst the vessel was in dock at Takoradi and was there hospitalised. The other cases were treated with Paludrine on board and had recovered on arrival.

SECTION XI

Measures taken against Ships Infected with or suspected for Plague

(i). All vessels from infected or suspected ports are required to attach efficient rat guards to the mooring ropes.

(ii). Suitable lengths of tarred hessian are wrapped around moorings, outside the leads, when the standard types of rat guards are not available.

No ships infected with or suspected for plague arrived during the year but a total of 79 vessels arrived from plague infected ports. No measures were required in respect of these.

SECTION XII

Measures Against Rodents in Ships from Foreign Ports

I. Procedure for inspection of Ships for Rats

(a) *Foreign-Going.*

As indicated by the accompanying table, a total of 144 black rats were recovered from ships trading " foreign " during the year.

When it is realised that practically all cargo vessels are subjected to frequent thorough inspections and trapping, when necessary during their stay in port, the comparatively small number of rats and the remarkably few ships found to have rat evidence in any degree is an encouraging indication of the improvement in the control and elimination of rodents in ships during the last five years.

Degree of Rat Infestation Found Aboard Vessels

Number of rats per ship.	*Number of ships.*	*Total rats recovered.*
1— 5	5	16
6—10	7 *	56
11—15	2 *	24
16—20	—	—
21—25	2	48
Total	16	144

* Forward notices in respect of rodent conditions found in six of these ships were sent to Port Health Authorities in other U.K. ports where they were proceeding to complete discharge of inward cargo.

Regular fumigation with high concentrations of gas, elimination of unnecessary harbourages, coupled with greater attention to inspection, and extermination of rats by various other methods, both in ships and on dock sides in the major ports, have all been contributing factors in bringing this about.

(b). *Coastwise.*

These vessels, trading beyond the limits of harbours and inland waters, but not to foreign ports, have been regularly visited. The majority of them can be termed regular traders as they enter the port with cargoes sometimes as frequently as once a week. Routine inspection of the cargo holds for evidence of rats has been carried out irrespective of the validity or otherwise of the Rodent Control Certificate. It is felt that inspections—to which no objections have been raised—can be of a helpful nature, when rat activity is found, for advice can be can be given to the master regarding suitable measures of repression.

Thirty-five Rodent Control Certificates were issued during the year, and it became necessary only in the case of one ship to carry out repressive measures prior to granting a certificate.

Table E

Rodents Destroyed During the Year in Ships from Foreign Ports

Category	Number
Black rats	144
Brown rats	—
Species not known	—
Sent for examination ...	93
Infected with plague	—

Table F

Deratting Certificates and Deratting Exemption Certificates issued during the Year for Ships from Foreign Ports

Number of Deratting Certificates issued					Number of Deratting Exemption Certificates issued	Total Certificates issued
After fumigation with		After trapping	After poisoning	Total		
H.C.N.	Other fumigant					
13	—	—	—	13	139	152

(c) *Inland Water Craft.*

These craft have been thoroughly inspected at regular intervals Most of them were found to be in a rat free condition. Infestation with rats and mice, to a slight degree, has been ascertained in craft, such as floating grain elevators and barges, which are used from time to time for storage purposes.

(*d*) *General Remarks.*

To-day it is possible to search ship after ship and find them only very slightly infested with rats, or, more often, completely rat free. Never, in the history of merchant shipping, have conditions been so satisfactory.

Ships of many nationalities, conveying different types of cargo from ports all over the world, have been carefully searched and, as the table shows, in nine ships only was a moderate to heavy degree of infestation discovered.

That such a small number as sixteen ships should be involved is a clear indication that successful rodent control and repression is being carried out, not only in British ships, but also in those of other nations. This favourable state of affairs does not, however, warrant any relaxation in the routine procedure of inspection and control of cargo ships, irrespective of their ports of origin or the type of cargo carried.

The new rodenticide—sodium fluroacetate—referred to as " 1080 "—has been used in experimental tests on ships during the last two years in this country, and has given such satisfactory results that it may be more generally used in the future. The treatment of ships with this very poisonous material will demand capable and well trained personnel. Rigid methods of control are needed when the baits are being applied and exposed in the ship, during collection, and at the termination of the treatment.

Furthermore, a very careful search must be carried out in order to recover all rodents killed by this chemical, which is very lethal in its effects on animals, birds and human beings. Cargo holds have to be empty before the work is carried out, but the method has the advantage of obviating the need for housing an entire crew ashore, which is required when hydrogen cyanide gas is used. It is not anticipated that sodium fluoroacetate will entirely supplant hydrogen cyanide, the use of which would be an essential requirement if it were found that plague infected rats were present. The highly lethal and penetrating properties of the gas would be necessary to ensure that the fleas, which convey the disease to man from rats were killed. Furthermore, disinsecting of ships' cargo holds is now as frequent an occurrence as deratting; and as hydrogen cyanide is used for this purpose, ship owners invariably apply for a deratting certificate when this has been done.

(2) *Arrangements for the bacteriological or pathological examination of rodents, with special reference to rodent plague, including the number of rodents sent for examination during the year.*

A routine proportion of all rats recovered is sent for examination for evidence of B. Pestis to the University of Bristol Laboratories, Canynge Hall, Clifton. During the year 93 were sent for examination: none was found to be infected with plague.

(3). *Arrangements in the district for deratting ships, the methods used, and, if done by a commercial contractor, the name of the contractor.*

Deratting of ships is done by commercial contractors who use Hydrogen Cyanide gas for the purpose. The undermentioned firms carried out deratting of ships at this port during 1953.

Messrs. London Fumigation Co. Ltd., London.
Messrs. Fumigation Services Ltd., London.
Messrs. Associated Fumigators Ltd., London.
Messrs. Deodor-X Hygience Services Ltd., Birkenhead.

(4). *Progress in the rat-proofing of ships.*

Abolition of wood sheathing in the insulated cargo holds of new ships, and the use of a minimum of wood in other ship fittings has eliminated a great deal of harbourage for rats.

In a few instances only has it been necessary to request that rat proofing be carried out, and in each case this has been to prevent rats gaining access to food stores. This was done by (a) fitting fine meshed gauze wire netting on the underside of the hinged gratings which cover deck openings into the storerooms, and (b) the use of sheet metal to close gaps caused by pipelines passing through the bulkheads.

SECTION XIII

Inspection of Ships for Nuisances

Matters arising out of the routine inspection of crew accommodation call for little comment. The type and number of defects dealt with during the year follow the same pattern as in previous years, with dirt and vermin defects predominating.

In the remedy of these defects ready co-operation has been given by owners' representatives.

In comparatively few instances was the work postponed to await attention in other United Kingdom ports when, as is now customary, forward notices were sent to the Port Health Authorities concerned. Three ships found to have considerable structural defects were referred to the Ministry of Transport surveyor. These defects were subsequently attended to when the ships underwent survey and repair.

Table G

Inspection of Ships for Nuisances

Nature of defects and inspections	No. of inspections carried out	Notices served			No. of defects found	Result of serving notices	
		Statutory	Informal	Forward (Phas/mot)		No. of defects Remedied	Not Remedied
Original construction	3,459	—	43	20	24	15	9
Structural—Wear and Tear					211	126	85
Dirt, Vermin, etc.					507	449	58
Totals	3,459	—	43	20	742	590	152

Hygience of Crew's Spaces

Vessels Trading Coastwise and Foreign

	British		Foreign		Totals
	s.s.	m.v.	s.s.	m.v.	
Number of revisits to vessels in dock by Inspectors	1306	1120	449	584	3459
Number of vessels reported defective ...	154	58	19	10	241
Number of vessels—defects remedied ...	131	47	19	9	206

Defects	No. of Ships Inspected	Original Construction		Wear and Tear		Dirt and Vermin	
Nationality		No. of ships	No. of defects	No. of ships	No. of defects	No. of ships	No. of defects
BRITISH s.s.	757	4	9	44	176	136	323
BRITISH m.v.	723	2	7	15	35	54	137
FOREIGN s.s.	228	1	8	—	—	19	31
FOREIGN m.v.	467	—	—	—	—	10	16
TOTALS	2,175	7	24	59	211	219	507

Defects	Number of Defects			Number Defects reported by Forward Notices, etc., to:			Number of Ships	
Nature	Found	Remeded	Not Remeded	Other PHA's	M.O.T. Survivor	Owner Master	British	Foreign
Original Construction	24	15	9	9	5	22	6	1
Wear and Tear	211	126	85	43	3	117	59	—
Dirt Vermin and Other Causes	507	449	58	35	—	91	190	29
TOTALS	742	590	152	87	8	230	255	30

Three other ships needing structural attention in the accommodation were reported upon and were subsequently sold—two for breaking up and one to foreign owners.

It is of interest to refer to the increased number of new British ships with single-berth cabins for every member of the crew. In every case it is evident that considerable attention has been given to the planning and layout of the accommodation, including berths, messrooms (cafeteria type), pantries, recreation rooms, sanitary and laundry facilities. All are arranged and fitted out so as to provide a standard of comfort which shows a marked advance, even when compared with accommodation in many ships built in recent years.

When inspecting accommodation of this type there is immediate recognition of the hygienic advantages of single-berth cabins. The privacy available to the individual encourages him to pay greater attention to the cleanliness of the berth which is set aside for his own exclusive use. This as a rule has a favourable influence on his habits of personal cleanliness which in turn makes him realise that the hygienic condition of one's person and surroundings has a beneficial effect upon health and well-being. When this is appreciated the individual will be more responsive to an attitude of co-operation and will help to maintain similar standards of cleanliness in the remainder of the accommodation, which he shares with others.

An interesting and efficient method of disinfesting crew accommodation was carried out, for the first time in this port, on a ship trading here regularly. Two other ships of the same company have since had similar treatment. A highly active insecticide such as Dieldrin or Aldrin is incorporated with a Urea Formaldehyde Resin to form a thin colourless varnish-like fluid which is sprayed or brushed on bulkheads and fittings where the insects are harbouring. It forms a slight bloom on the treated surfaces. Washing and scrubbing with soap and detergents in no way impairs the effectiveness of the insecticide which is persistently active for from one to two years.

It is also stated that the maximum insecticidal properties are retained throughout the period and in this way insects cannot acquire partial immunity as a result of being subjected to sub-lethal doses.

Inspection of accommodation in ships treated in this manner more than a year previously seems to support the claims put forward for this method of destroying insects. In each case, after a careful search, no evidence of insects was found.

SECTION XIV

Public Health (Shell-Fish)—Regulations 1934 and 1948

No changes have occurred during the year.

SECTION XV

Medical Inspection of Aliens

No changes have occurred during the year.

Medical Inspection of Aliens

Annual return by the Medical Inspector of Aliens for year ended 31st December, 1953.

	Seaport				Airport			
	TOTAL	Number inspected by the Medical Inspector	Number subjected to detailed examination by the Medical Inspector	Number of Certificates issued	TOTAL	Number inspected by the Medical Inspector	Number subjected to detailed examination by the Medical Inspector	Number of Certificates issued
(*a*) Total number of Aliens landing at the Port	131	129	2	—	133	133	—	—
(*b*) Aliens refused permission to land by Immigration Officer	24	—	—	—	—	—	—	—
(*c*) Total Aliens arriving at the Port	155	129	2	—	133	133	—	—

		Seaport	Airport		Seaport	Airport
Total number of vessels/aircraft carrying Alien passengers:	Inwards	75	43	Outwards	58	29
Number of vessels/aircraft dealt with by the Medical Inspector:		75	43		—	—

SECTION XVI

Arrangements for the burial on shore of persons who have died on board ship from infectious disease

No changes have occurred during the year.

SECTION XVII

Other Matters

1. Measures against rodents on docks, quays, etc.

Experience has shewn that the extent of rodent activity alters very considerably in a short space of time within a dock area. This is to be expected when very large quantities of various foodstuffs are continuously in transit through the dock, or being taken in for storage at the warehouses.

A warehouse or area of land, comparatively free from rats, may in a few weeks show evidence of increased activity, and require immediate attention. Constant searching and treatment by the operators on a planned mode of action, chiefly with " Sorexa " and other poison bait, makes it possible to detect and bring under early control these local foci of infestation which, if undetected, would soon spread and involve other areas. Control in this manner has been methodically applied over a number of years in the Bristol, Avonmouth and Portishead Docks with very encouraging results. As will be seen in the accompanying table the numbers of rats recovered from docks, quays and warehouses in 1953 were fewer than ever, confirming that continuous action, as described above, can reduce rat activity to satisfactory and manageable limits.

Category	1953	1952
Black rats	102	175
Brown rats	71	377
Species not known	—	—
Sent for examination	45	96
Infected with plague	—	—
Mice	46	73

2. Dock Sanitation

(a) *Factories, Workplaces and Canteens.*

Apart from a considerable amount of reconstruction and alteration still in progress in the existing premises of this type, three new factories came into operation during the year.

Minor modification in the sanitary accommodation arrangements to conform with the requirements of the Factories Act were asked for in two of these factories. These have been carried out.

The other premises under the above classification were inspected at regular intervals and found to be maintained in a satisfactory condition. When necessary, managements of the canteens have been advised regarding the proper arrangement for storage and disposal of kitchen waste, and so on, so as to eliminate nuisances.

Visits to such places where food is prepared and sold have shown that the general condition as to cleanliness has been satisfactory.

Number of routine visits to:

Premises in Dock Area	*Dock Sanitation*	*Public Conveniences*	*Tip*	*Salvage Dumps*
745	369	859	31	738

(b) *Public Conveniences.*

The sanitary accommodation on the docks has been maintained in good condition and is regularly and frequently cleaned.

The native type sanitary accommodation—referred to in last year's report—has been reconstructed and is now available for native crews when their vessels are in the dry dock.

(c) *Refuse Collection.*

The staff of the Transport and Cleansing Department must be again complimented on their efficient work of refuse removal from the docks. During the year 4,943 lorry loads of general refuse, amounting to approximately 2,500 tons and 309 loads of kitchen waste were collected and disposed of by the department.

3. Imported Foods

Approximately 732,000 tons of various foods for human consumption were discharged at the port during 1953. Increases over the totals of the preceding year in the import tonnages of certain commodities were as follows: sugar 50,500 tons; dried and fresh fruit 19,000 tons; butter 11,000 tons; cheese 3,400 tons; frozen and canned meats 5,300 tons. These increases, amounting to about 89,000 tons, were offset by more than half owing to a drop of about 50,000 tons in wheat and flour importations.

Food Inspection

Meats (Condemned)

Description	Decomposition and Mould				Brine Stain				Contamination and Taint				Total			
	T.	C.	Q.	lb.	T.	C.	Q.	lb.	T.	C.	Q.	lb.	T.	C.	Q.	lb.
Bacon		18	0	9				—				—		18	0	9
Beef		2	3	19		1	1	0				—		4	0	19
Mutton and Lamb	9	4	0	13			2	27		5	1	1	9	10	0	13
Offal		2	0	10				—				—		2	0	10
Total ...	10	7	0	13		1	3	27		5	1	1	10	14	1	13

Canned Goods (Condemned)

Description	Reason for Condemnation	Quantity (tins)	T.	C.	Q.	lb.
Fish ...	Blown, burst, rust holed, pierced and crushed	71			1	7
Fruits ...		8104	5	4	1	20
Jam ...	ditto	36			2	9
Meat ...	ditto	133		2	1	13
Milk ...	ditto	167		1	1	12
Tomatoes ...	ditto	1501	1	2	2	21
Tomato Juice	ditto	20				20
Vegetables ...	ditto	17			1	11
Total ...	—	10,049	6	12	1	1

Miscellaneous Foods (Condemned)

Description	Reason for Condemnation	T.	C.	Q.	lbs.
Barley	Oil Contamination and Decomposed	5	1	0	0
Butter	Rancidity				24
Chocolate	Dirt contamination				8
Confectionery	Dock water contamination			3	0
Custard Powder	Rodent contamination		1	0	18
Fat, Sweet	Dirt contamination		3	2	18
Flour	Brine damage, mouldy and insect infested	16	18	1	2
Fruit, Dried	Fermentation and mould	6	2	1	14
Fruit, Fresh	Decomposed	6	14	1	0
Mincemeat	Dirt contamination			2	0
Oatmeal	Wet damage and rancidity		10	3	22
Oats	Oil contamination	1	10	0	0
Rice	Mould and weevil infested		7	2	18
Tea	Wet damaged and mouldy	1	1	0	12
Vegetables, Fresh	Decomposed	4	10	0	16
Wheat	Oil contamination and decomposed	7	12	0	0
Total	—	50	14	0	12

Food Inspection

Particulars of Foods Detained for Re-exportation or Reconditioning at Local or other Food Depots

Description of Food	Reason for Detention	Tons (Approx.)
Beef and Beef Offal	Dirt, brine and mould contamination.	12
Butter	Wet and brine damage.	14
Canned Fish	Wet damage and rusty	8
,, Fruit	Wet damage, rusty and blown tins	28
,, Meat	,, ,, ,, ,, ,,	4
,, Vegetables	,, ,, ,, ,, ,,	10
Desiccated Coconut	Insect infested.	14
Flour	Brine and wet damage and mouldy.	208
Fruit, Dried	Wet damage, mouldy and fermenting.	47
,, Fresh	Oil contaminated.	5
Lambs and Sheep	Dirt, brine and mould contaminated.	258
Rice	Wet damage and insect infestation.	5
Skim Milk Powder	Wet damage and mouldy.	2
Tea	,, ,, ,,	19
Total	—	634

Drinking Water Samples from Ships

Name of Vessel	Result
" Coquetdyke "	Unsatisfactory.
" Dongola "	Some multiplication of organisms.
" Dunkerton "	Satisfactory.
" Irene K "	Starboard tank: Satisfactory. Port tank: 37 deg. C. count raised.
" Portway "	Satisfactory.
" Regent Hawk "	Satisfactory.
" Ronald M. Scobie "	Galley tank: Satisfactory. Engine Room tank: High count.
" Saltom "	Satisfactory.
" Steepholm "	Satisfactory.
Tug " BP.1 " (Water boat)	From Delivery hose: Unsatisfactory. From tank: Satisfactory.
" Waipawa "	Undesirable bacterial activity.

Food Inspection

Samples of Imported Foodstuffs taken 1953 and sent for examination by the Analyst or Bacteriologist.

Number of Samples	Description of Commodity	Country of Origin	Exam. for *	Result
2	Asparagus, Special	Australia	B.M.	Satisfactory
2	Beans, Garden	S. Africa	M.P.	,,
2	Beef, Corned	,,	B.P.	,,
2	Beef Loaf, Minced	Australia	B.P.	,,
2	Beef Steak Pudding	,,	B.P.	,,
2	Beef, Corned with Cereal	S. Africa	B.P.	,,
2	Cherries	Italy	P.M.	,,
6	,, Red	,,	M	Sound tins satisfactory.
1	Chocolate Couverture	Eire	P.	Satisfactory
1	Chocolate Crumb, Milk	,,	P	,,
2	Cream	,,	P.S.	,,
2	Cream, Jersey	C.I.	P.S.	,,
1	Crumb, Milk	Eire	P.	,,
4	Currants	Greece	P.	,,
1	Dessert Powder	Australia	P.	,,
1	Fruit Salad, Dried	S. Africa	P.	,,
2	Guavas	,,	M.	,,
2	Herring, Roes, Soft	Norway	B.M.	,,
1	Juice, Orange Valencia	S. Africa	M	Signs of attack
1	Juice, Pear, Conc.	Swiss	M.	Satisfactory
1	Juice, Pineapple	Malaya	M.	,,
3	Juice, Pineapple	Australia	M.	,,
2	Juice, Tomato	Australia	M.	,,
2	Lamb Tongues	N.Z.	P.S.	,,
4	Meat Loaf, Minced	Australia	M.S.	,,
2	Mutton, Stewed	,,	P.S.	,,
2	Peaches, Elberta	S. Africa	M.	,,
1	Peaches, Freestone	,,	M.	,,
3	Peas, Garden	,,	M.	,,
4	Pilchards in Tomato Sauce	,,	M.S.	,,
6	Pineapple	Australia	B.M.	,,
2	Pineapple	,,	B.	Bacterial activity.
2	Pineapple	,,	B	Repeat of above— Satisfactory
2	Pineapple Cubes	Malaya	M.	,,
3	Pineapple Pieces	S. Africa	B.M.	,,
1	Pineapple Slices	Kenya	M.	,,
8	Plums	U.K.	B.M.	Unsatisfactory.
4	Pork Brawn	Denmark	B	Satisfactory
2	Pork, Chopped	S. Africa	B.P.	,,
2	Pork Luncheon Meat	,,	B.P.	,,

* *Key*	*Examined for:*
B	Bacterial contamination.
M.	Metallic contamination.
P.	Preservatives.
S.	Soundness or purity

Number of Samples	Description of Commodity	Country of Origin	Exam. for *	Result
1	Puree, Tomato	S. Africa	M.	Satisfactory.
4	Puree, Tomato	,,	M.	Copper in upper limits.
2	Puree, Tomato	Italy	M.	Satisfactory.
2	Raisins, Seedless	U.S.A.	S.	,,
6	Rock Lobster	S. Africa	B.M.	,,
4	Sausages, Pork	,,	B.P.	,,
2	Soup, Tomato	Australia	M.	,,
4	Steak, Stewed	,,	B.P.	,,
2	Steak, Stewed and Mutton	,,	B.P.	,,
2	Stew, Irish	,,	B.P.	,,
2	Strawberries, Cnd.	Holland	M.P.	,,
1	Sultanas	Turkey	P.	,,
43	Tea	Ceylon	S.	,,
2	Tea	India	S.	,,
24	Tomatoes	Italy	B.M.S.	,,
6	Tomatoes	,,	,,	Sound tins satisfactory.
1	Veal, Jellied	N.Z.	B.	Bacterial action—condemned.
2	Veal, Stewed	N.Z.	B.P.	Satisfactory

* *Key*	*Examined for:*
B.	Bacterial contamination.
M.	Metallic contamination.
P.	Preservatives.
S.	Soundness or purity.

Miscellaneous Samples

Number of Samples	Description of Commodity	Country of Origin	Remarks
1	Carton (Contained Seedless Raisins)	U.S.A.	Wet damage—no sea water or other contamination.
8	Hides, hair, dust	Argentina	Anthrax spores isolated.
1	Mustard Oil	Ship's stores	On complaint—Oxidation—unsuitable for use.
1	Super Phosphate	Germany	Request of NDLB—harmful effects on skin—nil.
1	Chest (Contained Tea)	India	White desposit on wood and outer surface of foil—mould growth—contents satisfactory.

(a) *Meat.*

Frozen meat cargoes totalling 40,320 tons and an additional 10,760 tons of chilled meat from Eire, were dealt with in 1953.

The hold and quayside handling of this commodity continue to improve. The use of canvas sheets and running boards to cover working tiers of meat in the cargo holds, and canvas covered raised platforms to receive the meat nets on the quay is now a routine procedure. These protective measures prevent a great deal of contamination of the meat which would otherwise be liable to occur.

In a few instances the stowage of chilled carcases and offal shipments from Eire was not entirely satisfactory. This matter was brought to the notice of the exporters, and alternative suggestions for the stowage of these commodities were thereafter adopted in order to avoid unnecessary spoilages and contamination.

Owing to loading delays in the country of origin, and the resultant variations of freezing temperatures in the compartments used, part of one cargo of frozen meat showed considerable evidence of mould and general deterioration. Approximately 8,000 wethers and ewes, and 100 quarters of beef, were detained at the Royal Edward and St. Andrews' Cold Stores. The detained meat was subjected to a complete examination, for reconditioning or condemnation as required.

(b) *Other Foods.*

Numerous shipments of a great variety of foods were inspected, sampled, and when necessary detained for detailed examination. A total of 191 food and 11 miscellaneous samples were taken for chemical and/or bacteriological tests. Of all the foods examined it is pleasing to report that comparatively small quantities required action under the provisions of the Imported Food Regulations, either for reconditioning, or condemnation and destruction. These totals amounted to 634 tons and 68 tons respectively.

The copper content of samples of South African tomato puree was found to be just within or slightly above the recommended permissible limit. The consignees were advised and agreed to inform their principals in South Africa of the need to supervise more carefully the spraying of the tomato plants, and the canning processes, to eliminate the source of copper contamination.

A consignment of canned Italian tomatoes was found to have a high percentage of blown tins. Contents of apparently sound tins were satisfactory. A complete inspection of the whole shipment was carried out and all blown and doubtful tins were rejected and destroyed.

The number of blown tins in a small parcel of canned jellied veal from New Zealand was unusually high. Laboratory tests showed that the tins were blown as a result of bacterial spoilage. The whole parcel was surrendered for destruction.

Three shipments of dried fruit from the U.S.A., were found to have a large number of cartons in a wet condition, the contents showing some evidence of fermentation and mould growth. Altogether, more than 3,000 cartons, affected in this manner, were detained for reconditioning under supervision. Deterioration had been caused by the use of unseasoned dunnage and as a result of the effect of high temperature and humidity in the cargo holds during the voyage.

It is appropriate at this stage to refer to the unsatisfactory condition of rail vans for the carriage of meat and other foods. Too often these are found to be in a filthy condition, or smelling strongly of fish products, disinfectants or other objectionable odours, and are quite unsuitable for the purpose intended.

Surely the prevention of food contamination or taint justifies as much attention during carriage in rail vans as at any other stage of the journey from producer to consumer. Every effort should be made to ensure that vans are in all respects fit for conveying food, and the duty should be delegated to persons who appreciate the importance of the responsibility involved. In addition, railway authorities should aim at confining the use of certain vans exclusively to the carriage of certain types of food.

If this were done, a great deal of unnecessary contamination, and other deterioration of food, would be avoided.

The banana trade has now entirely reverted to Messrs Elders & Fyffes. They have continued the practice of allowing bananas over ripe for trade distribution to be made available to local hospitals and children's homes. Thanks to their good offices, 19,000 lbs. were collected during the year.

4. New Legislation

The Merchant Shipping (Crew Accommodation) Regulations, 1953, made by the Minister of Transport under the provisions of the Merchant Shipping Act, 1948, were published in July.

These regulations—39 in all—and enforced by Ministry of Transport Surveyors, will come into operation 1st January 1954. They apply to all British vessels (other than fishing boats, Lighthouse Authority ships and pleasure yachts) registered in the United Kingdom either before or after that date, and, broadly speaking, conform to the standards agreed upon at the Seattle International Labour Conference in 1946 and adopted on revision at a similar conference in Geneva in 1949.

The Regulations deal in some detail with such matters as number of persons per room, floor space, head room, insulation of deckheads and floors, separate messrooms, sleeping and recreational accommodation, heating, lighting and ventilation, also the number of W.C.s, wash-basins and showers to be provided.

Specifications are given as to the situation and fitments of galleys, provision storerooms, for suitable furniture and other fittings in the accommodation. Most of the requirements laid down in the Regulations have been included in the majority of the ships built during and since the war period. Port Health Authorities have not as yet received any directive as to the part that their staffs are to take in bringing into effect the provisions of these Regulations.

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I. THE WILLIAM BUDD HEALTH CENTRE

by R. C. Wofinden (*Deputy Medical Officer of Health*)

I. Introduction

Since the centre was opened on 16th September, 1952, it has been in full use by six general medical practitioner firms and the local authority. Throughout this period it has been visited by legislators, administrative, health and social workers from all parts of the British Isles, Scandinavia, other European Countries, the Americas and South East Asia. Almost without exception the visitors' reports have been very favourable.

Inevitably the period under review has been one of rapid evolution of the health services in the area served by the centre. It is now true to say that in no other district of Bristol is there such close co-ordination of medical services or such excellent co-operation between the medical and ancillary staffs employed in the field by various health administrative bodies.

The Joint Advisory Committee has not met since 1st September, 1952, but since that time the House Committee has met on five occasions for the purpose of deciding the detailed arrangements for the running of the centre. Day-to-day administration has been ably carried out by Sister Padfield and her deputy, Sister Vittle, with the advice and assistance of the officers of the Local Health Authority and the Executive Council.

2. Staffing changes

There have been several changes in the members of the staff since the centre was opened.

Miss Clark, the general duty clerk, left on 4th July, 1953 and was replaced by Miss Y. Chaplin.

Nurse Arblaster left on 30th April, 1953 and was replaced by Miss M. M. Davies. Miss Vittle, the deputy sister-in-charge, has also resigned recently and the Health Committee has recommended that her post be filled by Miss M. M. Davies.

Miss Cleeve, one of the secretaries, resigned on 30th September, 1953 and has not yet been replaced.

Dr. Norman Cook resigned at the end of September. His resignation opens up possibilities which are discussed later in the report.

In view of the experimental nature of the centre, staff changes had been anticipated. Most of the resignations have been on personal or domestic grounds.

A high proportion of the running costs of the centre are accounted for by staff wages and salaries, and the possibility of alternative staffing arrangements has been much in mind. After the fullest consideration it was decided that the two vacant posts of staff nurse and secretary be not filled for at least six months. The remaining secretary reverted to a 9 a.m. to 5 p.m. working day and the evening surgeries were staffed with sessional clinic nurses. It is hoped that this will lead to no loss of efficiency at the centre nor to any loss of service or inconvenience to the general practitioners. These new arrangements will lead to an annual saving of £500–£600 and is therefore worth a trial. It has been agreed that the establishment will remain unchanged at present in case the subsequent nature and/or volume of work undergoes further change and it becomes necessary to fill the vacant posts.

3. Time Table

The appended time-table (Schedule A) shows that practically all the rooms in the centre are in full use from 9 a.m., to approximately 8 p.m. Monday to Friday inclusive.

The general plan has been adhered to that the practitioners should use the health centre suites in the mornings and evenings and the local authority in the afternoons. This arrangement has proved highly satisfactory and the fact that the practitioners' surgery hours are staggered (this was purely chance and not planned) has helped to prevent congestion of rooms and overloading of staff and has facilitated the cleaning of rooms between sessions.

It will also be noted that two or three of the doctors are now using the centre in the afternoons for the purpose of carrying out ante-natal and infant welfare clinics for their own patients. School medical sessions have been held on two afternoons a week since January, 1953. A consultant obstetrician session, a nutritionist's session and relaxation and mothercraft sessions have also been in operation from an early stage in the centre's development.

4. Volume and Nature of Work

A. General Practitioner work

Theoretically, the centre serves a population of approximately 30,000 although only just over 10,000 people are on the lists of the general practitioners working there. The local authority clinics at Bedminster and Broadfield Road also serve the periphery of the health centre area. Moreover, before the centre came into operation there had been in existence a busy minor ailment school clinic within the grounds of Connaught Road School and this has remained in operation for continuation treatment. For these and other seasons it cannot be claimed that the health centre is, in fact, serving the main medical needs of 30,000 people.

On average 8,261 patients a quarter attend the six practitioner firms. The winter quarters November—January and February—April were particularly busy.

A particularly promising development is the recently started maternity and infant welfare clinics operated by the practitioners. The doctors see their expectant mothers in association with the district municipal midwives and health visitors and the hospital specialist obstetrician. Thus the patient, instead of having to visit midwife, general practitioner, local authority doctor and hospital specialist on separate occasions in different places, has only one place and visit at which all her ante-natal care is given, including mothercraft teaching and relaxation therapy. Only one, instead of four, sets of notes is in existence for each patient. Similarly, the doctors conducting their own infant welfare clinics have the advantage of the co-operation of the health visitor in general health education and special teaching in infant care. Four practitioner firms conduct ante-and post-natal clinics and 3 firms infant welfare clinics.

The minor surgery has become increasingly busy. " Treatments " given there include: dressings, injections of penicillin, insulin, liver preparations etc., and simple suturing of wounds. The quarterly average of patients treated was 2,245. The number of " casuals " given treatment, that is, patients not on the health centre doctors' lists, has averaged 82. For the first few months the purpose of the centre was misunderstood; the population regarded the centre as a casualty out-patient department and used it, frequently for trivial complaints; a few non-health centre practitioners thought they could refer their patients for treatment to the centre. By personal instruction and group talks to local organisations the purpose of the centre is now better understood. There had been a falling off in the number of casuals until the summer months when the lighter evenings put local children at longer risk. However, no genuine emergency is turned away from the centre. Arrangements are made either to call the appropriate doctor, order an ambulance to send the patient to hospital, or initial treatment is given whereafter the patient is referred with a note to his or her own doctor.

Night calls of all types have been less frequent than anticipated being, on average between 1—2 a night. Of the 543 " out of hours " calls a nurse had to be called on 150 occasions, that is, an average of 12.5 per month.

From an early stage an obstetric specialist from the Professorial Unit has held a regular consultant session at the centre. His services have been freely available to general practitioners and to the local authority doctor and midwives; personal contact with him has been most valuable. Previous reference has been made to the single system of record keeping for patients and the expectant and nursing mothers have appreciated the advantage of attending one centre at which they could obtain all the necessary care. Twenty-four sessions have been held at which 374 patients were seen, an average of 15 per session.

The number of patients referred to hospital diagnostic units by practitioners and local authority doctors for some of the more important special investigations, such as chest X-ray, blood counts, urine examinations, etc., totalled 826 during the period under review. In addition 618 patients were referred to hospital consultants by general practitioners.

It should be noted that in accordance with the practice in all Bristol local health authority clinics every expectant mother is encouraged to have a routine chest X-ray; this practice is being followed at the William Budd. It is already apparent that considerable advantages would accrue to both patients and general practitioners if there were available at the centre a minimal X-ray and pathological service.

B. Local Authority Work

(*a*) *Ante-natal clinics*

The medical officers hold one session a week at the centre in order to give ante-natal care to expectant mothers living in the area whose doctors do not work in the centre. At twenty-four sessions there have been 403 attendances, that is, an average of 17 patients a session.

The district midwives hold two sessions a week and at twenty-six sessions have had 371 attendances, that is, an average of 14 per session.

(*b*) *Infant Welfare Clinics*

At 44 sessions, the children examined and about whom advice was given to the mother were as follows:—

under 1 year of age	1237	infants, i.e., average 28 per session.
1—2 years of age	384	children i.e., average 9 per session.
2—5 years of age	371	children i.e., average 8 per session.
TOTAL	1992	

(*c*) *School Medical Clinics*

There are two doctors' sessions a week. At 57 sessions there have been 1,215 attendances giving an average attendance per session of rather more than 21.

(*d*) *Physiotherapy*

Ante-natal and post-natal exercises (Relaxation classes)

At 21 sessions there have been 105 patients, giving an average of 5 patients per session.

(*e*) *Nutritionist's Clinic*

A separate note is appended on this clinic which is proving a unique and valuable undertaking.

5. Repercussions on General Practice in the Area

(*a*) *New Patients at the health centre*

In accordance with the original agreement, new patients attending the centre and with no special preference for any one doctor have been allocated to each doctor in rotation. The number of new patients on each doctor's list has been reviewed each quarter so as to keep a fair allocation.

(*b*) *Transfer of patients in the area* ("*Drift*")

Careful records have been kept by the Executive Council of patient transfers to and from the Centre. From these it has been clear that there has been no abnormal drift to or from the lists of the doctors working in the Centre.

(*c*) *Co-operation of Health Workers*

One of the most important and significant developments in this area has been the enormous improvement in co-operation between the general practitioner and local authority health workers in the area.

Mention has already been made of the greatly improved maternity services in the area and of the developing interest of the general medical practitioners in preventive medicine as evidenced by their starting infant welfare clinics. Further extension along these lines would lead to the exclusion of the local authority doctor without any loss in the efficiency of the preventive health services. But, in addition, there is now excellent co-operation between the three district health visitors based on the centre and the practitioners. The doctors now feel that the health visitor can be as valuable to him as the midwife and district nurse. The staff room has proved to be the most important room in the building for it is here that all medical and social workers in the district (including probation officers, children's officers, voluntary case workers and the like) foregather and meet the doctors to discuss particular patients or their families.

With greater rapidity than had been expected the health and social workers in this area are being welded together into a team which has the interest of the patients and family at heart and each member of the team is now in the favourable position of being fully informed on all known factors operating in each case.

(*d*) *Standard of General practice in the area*

It is difficult to assess the standard of any general practice and it would be invidious in this report to make extravagant claims about general practice at the William Budd Health Centre. However, the secretarial and nursing assistance have undoubtedly given the doctors more time to examine and advise their patients. The treatment room, in which an increasing volume of work has been undertaken, has enabled many patients to be treated who would otherwise have gone to hospital out-patient departments.

The service to the patient and the interest and standard of general practice would undoubtedly be further improved with some X-ray and pathological investigational facilities and a dispensary within the Centre.

(*e*) *Agreements*

For the first year no formal agreement has been in force between the Executive Council and the Local Health Authority. The only form of agreement between the doctors has been the observance of the recommendations contained in the August 1952 Report to the Joint Advisory Committee. This arrangement has so far proved quite satisfactory and has facilitated the development of new services.

6. Future Developments

It has already been pointed out how, in this area, the health services are being co-ordinated and rationalised to the mutual advantage of the patients and the various health and social workers. The present physical limitations of space within the Centre have in fact forced co-operation and co-ordination for without this the whole organisation would have been chaotic. Moreover, the limitation in size of the centre has helped to preserve a more intimate and homely atmosphere for the patients.

Attention has also been drawn to what are regarded as being desirable developments in the immediate future; for example, the provision of X-ray and pathological investigational facilities and the possible provision of a pharmacy. This will now be considered in more detail. Ideally, the extention of facilities would be achieved by building an additional wing. However, even without such new building much could be accomplished by making use of the vacant suite. By the end of the year the possible future development of the centre was being actively discussed by the Health Committee and the Executive Council.

Schedule "A"

WILLIAM BUDD HEALTH CENTRE, LEINSTER AVENUE, KNOWLE 4

SURGERY HOURS

Doctor	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Morning Firm A.	9—10	9—10	9—10	9—10 (I.W. by appt.) (10—10.30)	9—10	9—10
Firm B.	9.30—10.0	9.30—10.0	9.30—10.0	9.30—10.0	9.30—10.0	9.30—10.0
Firm C.	10.30—11.0	10.30—11.0	10.30—11.0	10.30—11.0	10.30—11.0 (I.W. by appt.) (11.30—12.0)	10.30—11.0
Firm D.	11.0—11.30	11.0—11.30	11.0—11.30	11.0—11.30	11.0—11.30	11.0—11.30
Firm E.	11.15—12.0	11.15—12.0	11.15—12.0	11.15—12.0	11.15—12.0	11.15—12.0
Firm F.	12.0—12.30	12.0—12.30	No surgery	12.0—12.30	12.0—12.30	12.0—12.30
Afternoon Firm F.	I. Welfare 2.30—3.0		A.N. Clinic by Appt.			
Firm B; Firm C. Firm D; Firm A.						
Evening Firm A.	5.0—5.45	5.0—5.45	5.0—5.45	5.0—5.45	5.0—5.45	No surgery
Firm C.	5.15—6.0	5.15—6.0	5.15—6.0	No surgery	5.15—6.0	No surgery
Firm D.	6.0—6.30	6.0—6.30	No surgery	6.0—6.30	6.0—6.30	No surgery
Firm E.	6.30—7.0	6.30—7.0	6.30—7.0	No surgery	6.30—7.0	6.30—7.0
Firm B.	7.0—7.30	7.0—7.30	No surgery	7.0—7.30	7.0—7.30	No surgery
Local Authority Clinics Aft. session, 1.30—4.30 p.m. 1.30—4.30 p.m.	Mids ANC School Med. Session	I. Welfare	I. Welfare Nutritionist	Relax: M'craft Sch. Med. Sess.	A.N.C.C. A.N.: P.N. & B.C.C.	

2. THE NUTRITION CLINIC IN THE WILLIAM BUDD HEALTH CENTRE

By Miss C. M. Wood, M.A. (*Nutritionist*)

The nutrition clinic at the William Budd Health Centre was begun in October, 1952, largely in the form of an experiment to find how far the services of a nutritionist might be useful to the general practitioner. Previous work done in schools, ante-natal clinics and nurseries in the area from which the centre draws its patients, indicated that food and feeding habits of at least some of the population around left much to be desired. It was felt that poor nutrition would eventually result in sickness and ill health and consequent request for medical attention. The main purpose of the clinic is to advise such patients on the principles of good feeding and normal diet rather than to provide therapeutic diets for functional disorders, although these are available if required. One afternoon a week is given to this work, and the patients are limited, with a few exceptions, to those referred by the general practitioners working in the Health Centre, the appointments being booked by the Sister-in-charge.

Each patient is accompanied by a note from his doctor with the dietary treatment requested. The rule of only seeing patients referred by their own doctor is rigidly adhered to, even though many unsolicited patients hear of the Nutrition clinic and present themselves for treatment. If time permits a short general talk is given to these patients on the importance of certain foods in the daily diet, but actual dietary treatment is not undertaken. A few of these patients subsequently reappear at the centre with their own doctor's permission and are accepted for treatment, even though their doctor does not practice from the Health Centre.

The greatest number of patients referred to the clinic are cases of overweight. This is to be expected as obesity is undoubtedly the commonest nutritional disorder of the present time and gives rise to much ill health. Many of these patients come to their doctor, not so much complaining of increase in weight itself, but suffering from conditions which may be alleviated by reduction in weight, viz. : backache, varicose veins, headache, asthma, bronchitis, angina, hypertension, gall stones, glycosuria and valvular disease of the heart. There are also several cases of obesity, ante-natal and post-natal, and a few following rheumatic fever. Of the requests for therapeutic diets the most common are those for gastric and duodenal ulcers, hepatitis, nephritis, cholecystitis and diabetes.

After the patient is weighed and measured, and brief notes made of relevant data such as duration of symptoms, previous treatment, etc., a careful enquiry is made into the usual kinds of food eaten and dietary habits. This previous diet may have been deficient in some elements and excessive in others, and in almost all cases throws light on the patient's present condition. Errors are pointed out and corrected ; any good features of the previous diet are used as starting points and a properly balanced diet is planned to fit in with the family meals and working conditions. The reason for restriction of certain foods is always explained to the patient, and likes and dislikes taken into account. Lists of exchanges for food are given so that monotony is avoided. Culinary details and the cost of the diet are discussed with the patient or whoever looks after him—in the case of children and men, mothers and wives are asked to come to the centre for a short time.

Once a patient has been given a diet he is asked to come back to the centre the following week so that he may discuss any problems that have arisen at home or at work. He may also need encouragement. Appointments thereafter depend on the patient's condition, but obese patients are seen each week. In this way their progress may be noted —changes made in their diet when necessary and the regular weighing acts as a stimulus to them to adhere to the diet for a further week. Where it is known that co-operation at home is lacking, health visitors call at the patient's home to re-inforce the teaching. One outstanding example of this occurred where a very obese child with a tense abdominal operation scar did not seem to be responding to dietary treatment despite the fact that her mother had appeared to understand the instructions. It seems that an aunt of the child promised her a box of chocolates each week as a reward for keeping to the diet !

When it is considered that the dietary treatment is finished the doctor is approached for confirmation. He may also be consulted at any stage and the patient sent back if there is no progress.

There are a few defaulters but on the whole, the patients are most co-operative. The housewives especially appreciate the discussion of food budgets and domestic details. This enables them in many cases to understand the reason for their condition and to follow the prescribed diet.

This special clinic has become well known in the area and talks on food and feeding given to clubs and women's groups are often followed by discussions in which patients and former patients relate their new dietary experiences.

3. PUBLIC HEALTH BACTERIOLOGY

A Comment

By H. R. Cayton

(*Deputy Director of Preventive Medicine Laboratories, University of Bristol*)

Poliomyelitis apart, the year 1953 has not been marked by any dramatic outbreak of infectious disease. The work of the laboratory has progressed quietly and continuously.

Tests in greater variety and complexity have, and are, replacing the great numbers of single test specimens of former years. The virtual disappearance of diphtheria in the districts served by the laboratory has supported a curious reluctance in many practitioners to make use of the services available for a specific bacteriological diagnosis. Of the many cases of Scarlet Fever in the city, only a small percentage are investigated bacteriologically during the course of their illness ; the Streptococcus pyogenes, too, has lost its terrors. Carriers return to school unregarded and many others are needlessly excluded. Too often the aid of the bacteriologist is enlisted only when the disease fails to run the expected course and after various antibiotics have been exhibited and found wanting.

From the infectious diseases dealt with by the laboratory and of direct concern to the local health authorities, three may be singled out for special attention.

1. Anthrax

Work on this interesting and dangerous disease continued, following the finding during 1952 that the recent prevalence of the disease in pigs was associated with the presence of the resistant spores in proprietory feeding stuffs, compounded of animal derivatives from abroad.

During 1953 a docker unloading hides at Avonmouth contracted cutaneous anthrax. Subsequently viable anthrax spores were detected in the sweepings from the shed floor where the hides had been stacked.

The coarse salt used for the preservation of the hides is usually swept up and used by the Highways Department for spreading on icy roadways. The unwisdom of this small saving is obvious. Anthrax is an infection that may persist and recur in the most unlikely circumstances. In this instance a Bristol boy cycling to school, might have fallen and grazed a knee. The risk of tetanus is well recognised but anthrax might have been a sequel but for action by those concerned.

2. Food Poisoning

Dr. H. T. Phillips has discussed the epidemiology of Salmonella food poisoning elsewhere in this report. These infections are increasingly common among the general population. Though all are capable of multiplication in food and food products and so give rise, on occasion, to noticeable outbreaks of food poisoning they occur frequently among the people, as the sporadic case, and family outbreak.

Salmonellosis was diagnosed by the laboratory in 86 cases during 1953. No outbreak obviously food borne occurred in the city. *Salmonella typhimurium* retained its position as being much the commonest organism encountered,—57 times (62.8%). Large as this predominence is, past experience suggests that a considerable number of typhimurium infections were not investigated. This percentage (62.8%) is significantly lower than normal.

Among the other species encountered the most remarkable finding was that of *Salmonella saint paul* in thirteen cases. This organism gave rise to a sharp attack of enteritis and symptoms persisted for one week to ten days. The convalescent carrier state was often prolonged.

This organism might well have provided the epidemiologist with a productive study. It is sufficiently rare (incidence in England and Wales 1951, 3 cases ; 1952, 1 case), to assume that a connection existed between case and case, if it could be found. Unfortunately, however, although we observed the dissemination of the infection across the city during the Summer and Autumn, no direct connection was traced between the cases notified and bacteriologically investigated.

Other species identified were :—

Sal. montevideo	4
Sal. oranienburg	3
Sal. newport	3
Sal. brandenberg	1
Sal. minnesota	1
Sal. thompson	1
Sal. derby	1
Sal. bovis morbificans	1
Sal. new species	1

The Salmonella new species has the antigenic formula VI, VII ; i ; 1.6.

This strain gave rise to an acute and severe gastro enteritis necessitating hospital treatment. The suspected vehicle was saveloy sausage but none of the food was available for examination and similar samples were satisfactory.

The ultimate source of most of these uncommon Salmonella species is the animal kingdom and the food animals in particular, but the unreported cases and the subclinical infections together, constitute a reservoir of infection from which secondary cases are constantly arising. Of the 80 Bristol cases reported, 20 were under 2 years of age and as cases at this age are usually mild they may be regarded as unworthy of investigation and so overlooked.

There were few outbreaks of toxic food poisoning involving sufficient persons to incriminate a particular foodstuff. Those in which the food was available for examination were fewer. Only rarely is the laboratory in a position to sample the foods or foods consumed. A similar unopened tin is no substitute for the uneaten remains even if it has to be rescued from the dust bin.

Heat resistant strains of Clostridium welchii have been recognised as a cause of mild food poisoning with a characteristic symptomatology. We have not yet been able to do more than suspect this agent in the Bristol outbreaks.

3. Tubercle

The demonstration of the causative organism is still the crucial diagnostic procedure. The limitations of *direct microscopy* have long been recognised and clinicians rightly demand the more exacting methods of concentration and culture, and animal inoculation. These have begun to occupy an increasing proportion of our resources. While recognising the value of the specialised clinic with its diagnostic aids, it is understandable that the number of simple sputum examinations carried out has fallen very considerably. The treatment of tubercle is now so rewarding that it ill becomes us to neglect any measure which might disclose an unsuspected case or reveal a focus of infection.

The silent services which maintain a constant watch over the purity of food, milk, and water continue to do their various duties ; but the battles of environmental hygiene are largely won. In the field, the general practitioner is the all important case finder. More than ever before the success of preventive medicine depends on the ordinary family doctor. Yet, not for a generation has its practice been so neglected. The antibiotics are not a panacea for every mortal ill ; virulence is a relative term, and seemingly effete infections may yet revive to plague mankind.

PREVENTIVE MEDICINE DEPARTMENT 1953

Staff 1953

R. H. Parry, M.D., F.R.C.P., D.P.H., *Professor of Preventive Medicine.*

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A. H. Linton, M.Sc., *Lecturer in Bacteriology* (*Veterinary*).

D. B. Peacock, M.B., Ch.B., *Research Assistant and Serologist.*

Suzanne K. R. Clarke, M.B., Ch.B., M.R.C.S., L.R.C.P., *Demonstrator in Bacteriology.*

Patricia Palmer, B.Sc., *Recognised Teacher and Assistant Bacteriologist.*

Helen A. Dicker, B.Sc., *Recognised Teacher and Assistant Bacteriologist.*

A. J. Hedges, B.Sc., *Recognised Teacher and Assistant Bacteriologist.*

Examinations made during 1953

Local Authority Examinations (Public Health)

Swabs (*Ear, Nose, Throat*)	
Diphtheriae cultures	3,237
Other organisms including Streptococcus pyogenes	3,341
Films for Vincent's Angina	1,973
Whooping Cough diagnosis	22
Lancefield grouping (of Streptococci)	624
Meningococci	6
Antibiotic sensitivity	41
Staphylococcal carriers	203
Swabs (*Others*)	
Films only	132
Cultural investigations	674
Tubercle films	19
Cultures and concentrations	24
Biological test (tubercle)	1
Lancefield grouping. Streptococci	6
Antibiotic sensitivity tests	91
Sputum	
Tubercle films	1,860
cultures	955
concentration	945
Anthrax	1
Other films and cultures	192
" Yeasts "	3
Sensitivity tests	3
Biological Tests (Animal)	70

Water Analysis

Complete bacteriological examination	535
Special	—

Milk and Dairies

Biological Tests (Local authorities for Tubercle)	548
(Ministry of Agriculture Tubercle)	80
Brucellosis cultures agglutination tests	370
Phosphatase Tests	1,764
Designated milks, Tuberculin Tested	384
Pasteurised	1,446
Non-designated milks	122
Sterilised milks	49
" Cream line " tests	621
Plant tests	105
Bottle and churn rinses	574
Ice cream, count, coli and Methylene Blue	471
Synthetic creams	2
Ice lollies	34
Cream	9

Urines

Miscellaneous cultures (Enteric Fever)	47

Faeces

Direct microscopy, ova and protozoa		568
Intestinal pathogens, dysentery	2,932	
Enteric Fever and Salmonella	2,331	5,263
Pathogenic coliforms		550
Tubercle bacilli films and cultures		2
Toxic " food poisoning " Staphylococcus Cl. welchii		44

Miscellaneous

Films for Malaria	1
Blood culture	14
Serum agglutinins, Widal test and Vi agglutinins	17
Leptospira agglutination	—
Paul-Bunnell Test	4
Animal inoculation, Leptospirosis	1
Trout, Salmonicida	1
Anthrax, feedings stuffs, etc.	98
Dust for tubercle cultures	24
Earth samples cultures	18

Rats

Post-mortem examination and cultures, Plague	166
Salmonellosis	136

Food and Food Hygiene

Processed Foods and Meat Inspectors' specimens

Full examination including film and aerobic and anaerobic cultures	191
Milks for haemolytic streptococci, etc.	13
Shellfish (batches)	47

Carcase neat, for parasites	106
for histology	169
Miscellaneous Investigations	66
Biological Tests Tubercle	19

Other Examinations (Clinical, pathological etc.,)

Urine and Urinary Deposits

Chemical tests	97
Microscopy and culture	403
Films for myc. tuberculosis	19
Cultures for myc. tuberculosis	17
Biological tests for myc. tuberculosis	50
Sensitivity tests for myc. tuberculosis	36
Leptospira	1

Parasitology

Faeces, ova worms, etc.	15

Pus and Other Fluids

Films and culture general	34
Cultures for myc. tuberculosis	30
Biological tests for myc. tuberculosis	107
Films for myc. tuberculosis	4
Mycological cultures, etc.	—

C.S. Fluids

Films only	2
Cultures for mycobac. tuberculosis	25
Biological tests	48
Identification for organisms	3
Pneumococcal typing C.S.F.	3

Miscellaneous

Cultures for identification	2
Biological tests (pyrogens)	2
Phage typing	1

Sputum

Aspergillosis film and culture	2
Biological test (tubercle)	12

Pregnancy Diagnosis

Friedman tests	446
Quantitative	4

Serology

Weil Felix	1
Paul-Bunnell test	1
Widal test	4
Culture	4
Malaria film	1

Venereal Diseases

Blood for Wassermann reaction	7,664
Kahn reaction	7,557
Quantitative reaction	1,319
C.S. fluids for Wassermann	672
Cells	21
Globulin	42
Protein	000
Lange	111
Films for gonococci	5,822
Cultures for gonococci	5,731
Urine for gonococci	2
TOTAL	59,417

4. THE DISEASES OF ANIMALS ACT FOR 1953

By Lt.-Col. D. I. C. Tennant, M.R.C.V.S. (*Inspector under the Act*)

Swine Fever Order, 1938

This year we were unfortunate in having an outbreak of Swine Fever in Bristol, the first for five years. The original outbreak occurred in East Anglia and was traced to swine fed on swill from U.S. Airforce camps which had not been properly processed before being fed. Via the medium of markets and dealers the disease gradually spread through the entire country affecting many thousands of swine, and involving the owners in considerable financial loss, as no compensation is paid to owners in the case of Swine Fever.

The disease first appeared in Bristol on 7th April, when two herds were found to be affected, by the end of the month a further nine herds had been affected, but the situation was then under control.

A vigorous campaign was launched through the local press and radio to persuade owners of swine to have them vaccinated against the disease. The idea caught on and many thousands of pigs were vaccinated in Bristol by local veterinary surgeons.

The Ministry of Agriculture prohibited the movement of all pigs other than those going to be slaughtered or for breeding purposes, also all markets were closed. This put a stop to the spread of the disease, and in Bristol no outbreak occurred during the month of May.

One further outbreak occurred during the month of June among a batch of pigs sent from Chippenham to Bristol without licence through a misunderstanding with the Chippenham Police. Fortunately the outbreak was spotted immediately, and the disease did not spread. Since June, 1953, there have been no further outbreaks of this disease.

No. of outbreaks	*No. of Carcases Destroyed*	*No. of Pigs from infected premises Slaughtered for human consumption*
12	36	431

During the period of the outbreak many swine from infected premises were sent under licence for slaughter at the two Abattoirs in Bristol. Many of these were found to be affected with the disease on post mortem examination, and the carcases had to be destroyed, which gave rise to quite a problem, as burial was not possible. However, the Chief Sanitary Inspector made a battery of flame guns available for burning the carcases.

Movement of Swine Order, 1952

During the year 383 pigs were licenced out of Bristol Market, and some 10,614 pigs arrived in Bristol under licence, for slaughter and fattening. The fattening pigs were inspected during the period of 28 days detention in isolation.

Inspection of Markets

Twenty-four markets were held during the year, and the following number of animals were passed through the market and inspected for contagious disease :—

Attested, supervised and T.T.	Bulls	48
	Cows	356
	Calves	33
Other cattle Irish Imported	Stores	238
	Dairy	4
	Rearing Calves ..	2
	Pigs	383
	Horses	3

Fowl Pest

There have been three outbreaks of this disease in Bristol during the year among poultry sent from outside areas. There has been a reduction in the number of outbreaks in the country as a whole due to the measures being enforced by the Ministry of Agriculture.

Performing Animals (Regulations) Act, 1925

A visit was paid to Messrs. Chipperfields Circus on Clifton Downs. They had an outbreak of disease amongst the lions and tigers which was diagnosed as Feline Influenza, Mr. Chipperfield himself was taken ill with a disease of unknown origin, but it is not known whether there is any connection between the incidence of Feline Influenza and Mr. Chipperfield's illness. It was not possible to carry out investigations as the circus moved on to another town.

Tuberculosis

The usual examination and testing of dairy herds has been carried out under the nation-wide scheme conducted by the Ministry of Agriculture and Fisheries. The incidence of tuberculosis among cattle has been greatly reduced, and it is hoped that before many years bovine tuberculosis will be completely eradicated from the country.

An unusual case occurred in Bristol of tuberculosis among a herd of swine. Of eighteen pigs sent for slaughter some twelve were found to be affected with tuberculosis of the head. An investigation revealed that the pigs had been fed on skimmed milk which appeared to be the source of infection. Necessary details were supplied to the Medical Officer of Health for an investigation to be made into the source of the milk.

During the latter part of the year two separate incidence of tuberculosis in a dog and a cat were diagnosed, and information supplied to the M.O.H. so that he could check on humans in contact.

Inspection of Pet Shops

Eleven Pet Shops have been examined this year, nine of these being new licences.

5. CIVIL DEFENCE RESPONSIBILITIES OF THE MEDICAL OFFICER OF HEALTH

By H. Temple Phillips (*Chief Assistant Medical Officer of Health*)

In August 1949, the Civil Defence Committee assigned the following responsibilities to the Medical Officer of Health :—

(*a*) First Aid in Rescue Work ;

(*b*) Disposal of Civilian War Dead ; and

(*c*) Health and Welfare of Occupants of Public and Communal Shelters.

The planning of these services was supervised by Dr. J. Hutton until he left Bristol early in 1952. Proposals for carrying out these responsibilities were approved in principle by the Civil Defence Committee in December 1950 and in 1951 Mr. E. G. H. Spencer was designated to supervise emergency mortuary arrangements.

During the latter part of 1951, the following officers attended an instructors' course—arranged locally on behalf of the Home Office—and became qualified to give instruction in :—

Civil Defence Aspects of Atomic and Chemical Warfare ; High Explosive Missiles and Fire Fighting ; and the fitting of respirators.

* G. L. Whone * J. Mountjoy	Chief Sanitary Inspector's Department
	and
E. G. H. Spencer	Chief Shops Inspector.

* (These officers subsequently attended the Home Office Training School at Falfield and gained a further qualification).

Sisters Hibberd and Laver, Health Visitors, and the Deputy Chief Ambulance Officer, Mr. G. Joy, attended an instructors' course in 1952 and also qualified to give the above instruction.

In April, 1952, the ambulance service was separated from the Fire Brigade, since in war-time this service must be linked with the general civil defence control and communications system and a separate system would be in existence for the fire service.

The Medical Officer of Health assumed further responsibilities in February 1953, which include :—

1. Basic First Aid Training
2. Full First Aid Training . .
3. Annual First Aid Revision

} for all sections of the Civil Defence Corps—Bristol Division.

4. Sectional training for members of the Ambulance Section of the Civil Defence Corps—Bristol Division.
5. The preparation of an operational plan for the Civil Defence Ambulance Service, in conjunction with other services.

6. Provision of Civil Defence training for members of the City Ambulance Service.
7. Decontamination of unwounded Civilians.
8. ,, Civilian Clothing.
9. The Identification of Toxic agents ; and
10. An emergency Veterinary Service.

To cope with the extra work involved, it became necessary to set up a Civil Defence Section within the health department and approval was given for the creation of an additional General Division post. This enabled organization to be accelerated and Home Office Training to be implemented.

The progress to date, may be summarized as follows :—

Emergency Mortuaries

Buildings have been ear-marked for this purpose. A staff establishment has been submitted to the Ministry of Housing and Local Government for approval, and negotiations are proceeding with the Bristol and District Funeral Directors' Association, with a view to preparing a " crash " plan.

Training for Members of the Civil Defence Ambulance Section

This has been organized on a sub-divisional basis—six divisions in all—and weekly practices are held. 410 volunteers had enrolled in the corps at December 31st, 1953, and have been provisionally attached to the divisions nearest their homes. Many have not yet responded to invitations to participate in the activities.

Two second hand ambulances have been purchased and are used for exercises and practical training. Volunteers are permitted to drive these vehicles after satisfying the Chief Ambulance Officer, or one of his senior staff, of their competence.

Operational Plan for Civil Defence Ambulance Service

A provisional plan is in course of preparation and envisages 3 " main " ambulance stations on the periphery and 6 " local " stations.

Civil Defence Training for Members of the City Ambulance Service

Details are included in the Chief Ambulance Officer's report.

Decontamination of Unwounded Civilians
,, Civilian Clothing

This problem is being considered by a Committee appointed by the Central Government. In the meantime, tentative schemes are being proposed which follow the arrangements made during the last emergency.

Identification of Toxic Agents

The scope of this work includes Atomic warfare (monitoring for radiation), chemical warfare, and biological warfare.

The City Analyst, Mr. E. G. Whittle, F.R.I.C., is the Chief Technical Reconnaissance Officer, he is organizing and training personnel to undertake this specialist task. Two members of his staff, Mr. I. Dembrey and Mr. A. B. Naish, are also trained technical reconnaissance officers, having attended courses of instruction at Falfield and at the University of Bristol.

Emergency Veterinary Service

Little guidance is forthcoming on the form or scope of this service. A preliminary discussion has, however, taken place with the Secretary of the Mid-West Veterinary Association, with a view to enlisting the help of local members.

In addition to making plans for these specific emergency duties consideration is also being given, in collaboration with the Chief Sanitary Inspector, to various peace time responsibilities, which would be intensified in the event of hostilities, for example, the control of infection ; purity of food and drink and water supply ; and sewerage.

6. MEDICAL RECORDS IN THE PUBLIC HEALTH DEPARTMENT

By Miss E. H. L. Duncan, M.A., B.Sc. (*Medical Records Officer*)

The Medical Records Officer, since being appointed in April, 1953, has been asked to advise on a large number of aspects of record keeping and record utilisation.

Advice on Routine Medical Records

The designing of new forms, or the improvement or adaptation of existing ones, is an ever-recurrent problem. So, also, is the co-ordination of records procedures within the department, whereby full information can be made available to the various units concerned without undue delay and without any unnecessary duplication.

There have been numerous requests for advice concerning the use of present records to supply information not previously required. This information may, in future, become part of the routine statistics supplied by the department, but most requests in this category are for factual information required during a special investigation into some aspect of a current problem. It is recognised that much useful information lies buried in the records of the health department and the records officer has a well-defined role in planning the most expeditious manner of extracting the information required and in presenting it in an easily-handled form.

Assistance has been given with a number of miscellaneous mathematical problems, with the presentation of numerical facts by graphs, charts or tables, and with the use of statistical tables and other records which gave relevant information for the subject under enquiry. The availability of such help when required is appreciated by workers who only infrequently have to deal with such matters.

Special investigations or surveys of a socio-medical character have occupied much of the records officer's time. These generally involve a greater or lesser degree of co-ordination with present recording systems and facilities. Planning the investigation may involve lengthy discussions on how to ensure including the complete group which it is desired to study or a truly representative sample of it, and deciding the questions which will be asked so that they will provide unequivocally the information required. Considerable help is given with defining, recording, grouping and analysing data, building up a picture of the group when viewed as a whole, and ascertaining the different factors with which the various facets are associated, and it has been found that previous experience in the techniques involved can expedite this work considerably.

Mechanical Analysis

The sorting and analysis of complicated data or of a large number of cases are greatly facilitated by the use of punched cards and mechanical sorters, and we record our gratitude to the City Treasurer who has allowed us to make full use of his machines at College Green and to his staff there who have given us expert assistance with our problems. In view of the increasing amount of this type of work—and with the greater awareness of the possibilities of these machines it will, no doubt, continue increasing still further—it is gratifying to know of the proposed conjoint scheme between the University and the Public Health Department to supply machines specifically for medical or socio-medical work. Delays in sorting punched cards are inevitable when, of necessity, this type of work, which is mainly for the benefit of future potential patients, must be given a lesser priority than the more urgent routine work of the City Treasury.

The statistical analysis of the final results of an investigation can be of a highly specialised nature and, because of the time factor, much of it is possible only with the help of an electrically-operated desk calculating machine. It is hoped that this may be procured by the department in the forthcoming year and thus allow a fuller use to be made of the information available in the records.

7. ADMINISTRATION

By P. J. Room (*Chief Administrative Assistant*)

Staff

It is with sincere regret that I have to record the death of Mr. F. J. W. Webb the Senior Clerk in the Staffing and Wages Section in February. Mr. Webb joined the staff in 1937 and occupied various posts in the department. With the upheaval caused by the operation of the National Health Service Act in 1948, there was an exodus of staff to positions under the Regional Hospital Board and Hospital Management Committees. At that time Mr. Webb was placed in charge of the Staffing and Wages Section and he tackled a difficult task in the transfer of records and placing on a sound basis of the existing section with marked ability. He had a quiet unassuming personality, but was a most efficient officer and delightful colleague.

The Staffing and Wages section was placed in the charge of Mr. A. E. Meacham who, as Senior Clerk, had controlled the Finance Section with distinction during the past few years.

To fill the vacancy, the Committee appointed Mr. L. C. Arbrey, formerly of the City Treasurer's Department to succeed Mr. Meacham as Senior Clerk of the Finance Section.

It was reported last year that Mr. R. G. Emblem had resigned his post as Records Officer to the Health Department. The post was advertised and a large number of applications to fill the vacancy was received. The committee selected Miss E. Duncan, M.A., B.Sc., Administration and Records Officer attached to the Midwifery Department of the University of Aberdeen. Miss Duncan brings to the post a very wide experience which should prove a valuable asset to the department.

Mrs. Stott, the Welfare Officer for Maternity and Child Welfare, retired on account of ill health on the 30th June. Mrs. Stott joined the department on the 1st April, 1930, and her work on behalf of the unmarried mother and her child has been an outstanding part of the health services of the city during the succeeding years. The easing of their difficulties and solving of seemingly overwhelming problems has brought a wealth of gratitude from those members of the community served by Mrs. Stott that cannot be measured. Her retirement from the department was very much regretted. Mrs. Stott was succeeded by Miss Reed, who had been her assistant since August, 1950.

The work of the Health Department is essentially that of service to the public, and the majority of the staff are either engaged in field work or in keeping clinical records. The number engaged on what may be correctly described as purely administration is relatively small. This has been and will continue to be the policy of the department so that the monies for health service authorised by the Council can truly be said to be applied in actual benefit to the citizens with a minimum expenditure on administrative requirements.

X-Ray Services

On the passing of the National Health Service Act the Regional Hospital Board became responsible for the diagnosis and treatment of tuberculosis. By arrangement with the Health Committee the Board used the X-Ray apparatus of the Corporation at the Central Health Clinic. This equipment was also used for the examination of maternity and child welfare cases, school children and for superannuation purposes.

The pressure on the facilities proved very high causing inconvenience to the patients and it became apparent that alterations must be made. Accordingly the City Council authorised the Health Committee to purchase an X-ray plant which included a camera unit for taking small films. The installation was completed during the early part of the year in the portion of the main hall of the clinic formerly used by the Mass Radiography Service. The separation of the X-ray services of the Health Committee and the Regional Hospital Board became effective on the 1st April. The staff of the committee consisted of two radiographers and a clerk/receptionist, but the service has proved so successful and the demand for its use reached such proportions that a dark room technician has been added to the staff.

During the year improved cubicle facilities have been provided to enable a greater number of patients to be dealt with.

Mental Health Service

The contract to provide additional accommodation for the Occupation Centre at Marlborough House was entered into and work commenced on the prefabricated unit at Kingsdown Parade in September. The numbers of children attending the centre continued to mount, and although the new accommodation which would enable 220 children to be dealt with was not ready, some 200 were in daily attendance. This made it imperative that staff should be appointed in advance of the completion of the new buildings to relieve the pressure on the existing officers. The Ministry of Health and the Establishment Committee approved the recommendations submitted, and five Assistant Supervisors were appointed.

General

It is with sincere pleasure that I again record the happy and ready co-operation of all sections of the department, and the team spirit that is shown by all the members.

Appendices

CONSTITUTION OF THE HEALTH COMMITTEE, 1953

Chairman :
Rev. A. M. Stockwood, M.A.

Vice-Chairman :
Alderman G. A. Watson Allan

Alderman :
Mrs. C. M. Keel

Councillors :

A. J. Allen
Mrs. A. M. Chamberlain
W. W. Clothier
E. A. S. Crocker
W. H. England
G. P. C. Ford
S. T. Gamlin
Mrs. E. Keight
Dr. A. M. MacLachlan
A. Maddison
R. C. Mansfield
J. J. Milton
Mrs. A. E. Nutt

PUBLIC HEALTH STAFF, 1953

Medical Officer of Health (City, Port and Schools) *:* R. H. Parry, M.D., B.S.(LOND.), F.R.C.P., D.P.H.,

Deputy Medical Officer of Health: R. C. Wofinden, M.D., B.S., D.P.H., D.P.A.

Principal Assistants

Chief Assistant Medical Officer of Health and Senior Medical Officer for Mental Health: H. Temple Phillips, M.D., B.S., D.I.H., D.C.H., D.P.H.

Senior Medical Officer—Port: D. T. Richards, M.R.C.S., L.R.C.P., D.P.H.

Senior Medical Officer—School Health Service: A. L. Smallwood, M.D., CH.B., D.C.H., D.P.H.

Senior Medical Officer—Maternity and Child Welfare: Sarah C. B. Walker, M.D., B.S., D.P.H.

Senior Medical Officer—Tuberculosis: A. M. McFarlan, M.A., M.B., B.CH.

Senior Dental Officer: W. H. B. Stride, L.D.S.

Chief Sanitary Inspector: F. J. Redstone, F.R.SAN.I., F.S.I.A.

Chief Administrative Assistant: P. J. Room.

Chief Nursing Officer: Miss L. M. Bendall

Technical Officers

Personal Assistant to the Medical Officer of Health: D. M. Evans, B.A.
Medical Records Officer: Miss E. H. L. Duncan, M.A., B.SC.
Nutritionist: Miss C. M. Wood, M.A.

Consultant Bacteriologist

Professor K. E. Cooper, B.SC., PH.D., M.R.C.S., L.R.C.P., A.I.C.

Deputy Consultant Bacteriologist

H. R. Cayton, M.B., CH.B.

Public Analyst

E. G. Whittle, B.SC., F.R.I.C.

SCHOOL HEALTH SERVICE

REPORT OF SCHOOL MEDICAL OFFICER

by

A. L. Smallwood

(Senior Medical Officer School Health Service)

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INTRODUCTION

A.L.S.

This is the third year that the alphabetical way of cataloguing the activities of the School Health Service in Bristol has been adopted. The system is logical and on the whole has been well received for the accessibility it gives to the contents and for the avoidance of the stereotyped layout which tends to repel potential readers.

One disadvantage is that some subjects obtain an undue prominence. For example, it must not be thought that in Bristol we go looking for accidents or are accident minded because " accidents " happens to be the first article. The subject is, however, worthy of attention and we believe a unique feature in a report of this kind, and is the result of a special investigation by Miss C. E. Cooke. Other special features are concerned with the assessment of deafness in young children (p. 20) by Miss Sharwood, a comparison of cases seen at child guidance clinics, at the Children's Hospital and at the Local Education Authority's Child Guidance Clinic, by Dr. Barbour (p. 9), an analysis of the work of the enuresis clinics by Doctors Kaye and Terry (p. 15), a special account of the work at the Cerebral Palsy Assessment Clinic and at the Claremont School for Spastics (p. 28) by Miss Ram and Dr. Woods, an experiment in health education by Mr. Evans (p. 33) and an account of mild epidemics of "epidemic vomiting" and athlete's foot (p. 35 & 37). Mr. Stride voices his concern over the dental service (p. 12) and some words are said about the decline in the demands on the minor ailment clinic.

I am glad to say that the co-operation of all who concern themselves with the care of children in Bristol continues at a high level. The Chief Education Officer and his staff and the teachers are more interested than ever in the medico-social care of children and especially show a lively appreciation of the needs of handicapped children. The Consultants, headed by the Professor of Child Health, and the general practitioners have become more conversant with the special approach of the School Medical Officer and collaboration between the three sides in the medical care of the child grows yearly. Health Education is the most urgent function which still remains in its infancy and with which all three must be vitally concerned in the future. Physical improvement can only be expected when all regard the acquisition of health with the importance which is to-day attached to the treatment of disease.

It is my pleasant duty to pay my yearly tribute to Mr. J. H. Middleton whose labours are represented here. The work of assembling, editing and correcting the contributions is done by him with great tact and skill, and the service owes him a debt of gratitude.

ACCIDENTS TO SCHOOL CHILDREN 1953

C. E. Cooke.

School accidents have been analysed this year by the punched card system. The figures shown in the tables given below are again taken from the report forms sent by Head Teachers to the Education department whenever an accident has occurred which they consider worthy of note. It will be seen that, as before, boys have twice as many accidents as girls. Although a record of accidents by month, age and sex has again been kept, it is not recorded here, as over the three previous years there is no outstanding month of accidents. Instead of this, a table showing the occasion on which an injury has occurred, by age and sex, has been included. Most accidents are covered by the occasions shown ; the miscellaneous column consists chiefly of falls on the way into schools, along corridors, up steps, and one is reported as : " Forbidden ground—the dustbin—as he climbed on the lid slipped off, and he fell in."

It will be seen that playtime is by far the most dangerous occasion. Games after the age of ten cause many accidents on the field, chiefly to boys.

In P.T., teachers are probably more prone to report accidents, however slight, as a certain amount of responsibility rests on them. Despite the great increase of climbing apparatus provided to Primary Schools approximately only 7% of the total number of accidents is involved with this. It may be of interest to note that of the two schools with the most frequent accidents (each having 2·7% of the children in the school as compared with the average which is well under 1%), one has no climbing apparatus whatever, and the other has very little, and that only in use occasionally.

Falls and collisions account for more than two-thirds of the accidents to children under eleven years of age, but only just over one-third to children of eleven and over. It may seem surprising that the head was the main site of injury in 193 cases, 42% of the total. More than half of these were to boys under eleven.

Fewer accidents caused by splinters occurred this year ; these were with one exception caused in the classroom by rough desks. Most of the old school hall floors are now in a better condition, having been successfully treated.

We have no figures for accidents to children outside school, but cases for which an ambulance was called are as follows :—

	Boys.	*Girls.*	*Total.*
January	28	15	43
February	48	16	64
March	59	12	71
April	67	22	89

The accidents increase as the days get lighter, being twice as frequent in April as they are in January.

Boys figure in these ambulance cases three times more frequently than girls.

A Table of types by Age and Sex follows. " Street Accidents " are those involved with vehicles.

Accident-Prone Children

Once again the " accident prone " children are hard to find. Of those mentioned in the 1952 Report, not one appears again as having had an accident in 1953 ; nor have nine children whose names appear twice in 1953 been reported in the three or four previous years.

The photographs show some of the mobility movements necessitating a knowledge of strength and relaxation which, it is greatly hoped, will

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give children a sense of ease and confidence that will enable them to continue to be "accident-free".

BRISTOL SCHOOL ACCIDENT SURVEY 1953

Occasion	Occasion on which injury occurred by age or sex																										Totals
	5		6		7		8		9		10		11		12		13		14		15		16		17		
	B.	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	
Playtime at school	13	5	18	8	13	5	13	8	19	3	13	2	7	6	11	4	5	5	9	1	2	—	—	—	—	—	170
Games in field	—	1	—	—	1	—	—	—	2	—	6	—	4	1	6	3	7	2	8	6	4	2	6	—	3	—	62
Games in playground	—	—	—	1	—	1	—	2	2	1	1	3	—	1	—	2	—	2	2	4	—	—	1	1	—	—	24
P.T.	5	3	2	2	3	2	2	1	2	3	1	1	3	3	9	4	4	3	6	1	1	—	—	—	—	—	61
Swimming Baths	—	—	—	—	—	—	—	—	—	—	3	—	—	—	1	1	1	—	—	1	2	—	—	—	—	—	9
Science Lesson	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	1	—	—	—	1	—	—	—	4
Cooking Lesson	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1	—	—	—	—	—	—	—	3
Gardening Lesson	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	1	—	—	—	—	—	—	3
Classroom	6	1	4	2	1	3	7	2	—	2	3	3	1	1	2	1	—	—	1	—	—	—	—	—	—	—	40
Woodwork	—	—	—	—	—	—	—	—	—	—	—	—	1	—	3	—	7	—	4	—	—	—	—	—	—	—	15
Other	3	5	3	6	6	—	2	—	4	—	3	4	3	4	4	2	5	5	5	4	3	2	—	—	—	1	74
TOTALS	27	15	27	19	24	11	24	13	29	9	30	13	20	17	37	18	30	18	37	18	12	4	8	1	3	1	465

BRISTOL SCHOOL ACCIDENT SURVEY 1953

Types of Injury	Types of injuries by age and sex																										Totals
	5		6		7		8		9		10		11		12		13		14		15		16		17		
	B.	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	
Fracture, crack	3	4	2	1	5	1	3	3	5	2	6	1	4	2	8	3	8	4	4	3	5	1	3	–	2	–	83
Dislocation	1	–	1	–	–	–	–	–	1	–	2	1	3	–	3	–	1	1	1	1	1	–	2	–	–	–	19
Sprain, strain	–	–	–	1	–	–	2	2	3	2	1	3	1	1	4	3	–	6	6	3	–	1	–	–	–	–	39
Cut, puncture, splinter . .	18	5	15	5	13	7	14	7	13	1	15	5	7	8	14	6	15	2	9	8	4	–	2	–	–	1	194
Burn, scald	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	1	1	–	–	–	–	–	–	–	4
Squeezed fingers	1	1	–	3	–	1	1	–	1	1	–	–	–	–	2	–	2	–	2	–	–	1	–	–	–	–	16
Bruise, abrasion, bump . .	3	3	6	4	3	2	4	1	3	2	2	2	5	3	5	4	3	2	8	2	1	1	1	1	1	–	72
Concussion	1	1	–	1	–	–	–	–	3	–	2	–	–	2	–	–	–	–	3	1	–	–	–	–	–	–	14
Nose bleeding	–	1	1	2	2	–	–	–	–	–	1	1	–	–	–	1	–	1	1	–	–	–	–	–	–	–	11
Other	–	–	1	1	1	–	–	–	–	–	1	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	6
No injury found . .	–	–	1	1	–	–	–	–	–	1	–	–	–	–	1	–	1	–	1	–	1	–	–	–	–	–	7
TOTALS	27	15	27	19	24	11	24	13	29	9	30	13	20	17	37	18	30	18	37	18	12	4	8	1	3	1	465

Ambulance Cases by Sex and Age from Jan. - April inclusive 1953

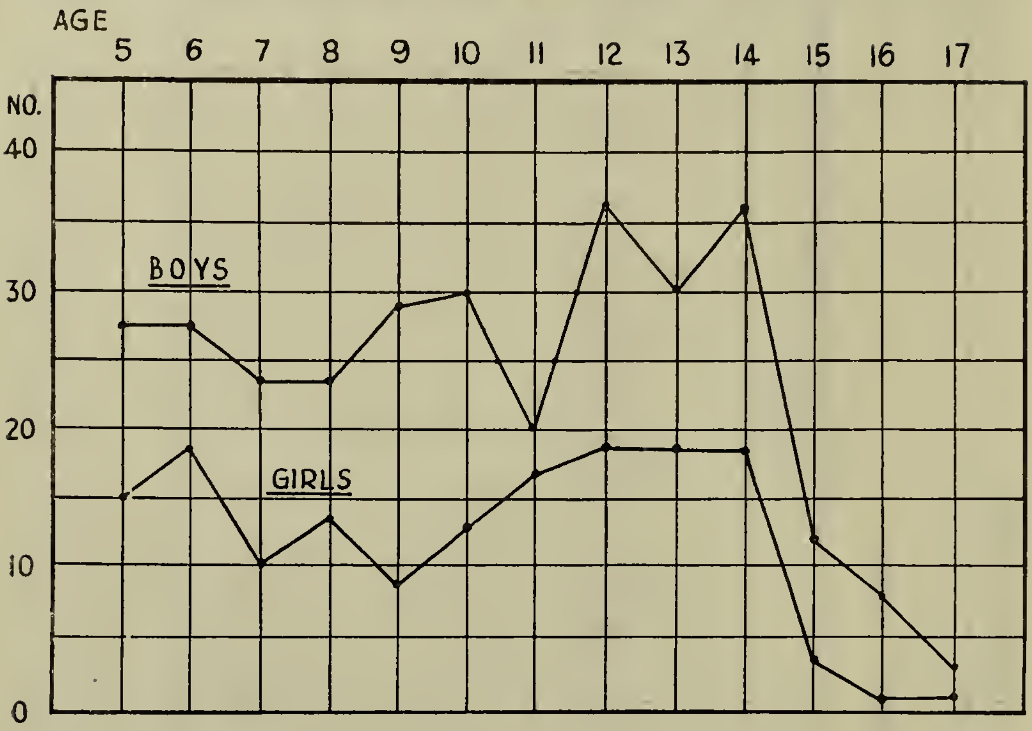
Type of Accident	5		6		7		8		9		10		11		12		13		14		15		Totals
	B.	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	*B.*	*G.*	
Falls	7	2	18	6	9	6	10	4	6	3	12	3	6	1	9	1	10	5	6	0	5	1	130
Cuts	5	1	5	2	6	3	6	0	3	0	5	4	4	0	4	3	6	1	2	0	0	0	60
Burns	1	0	3	0	1	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	2	0	10
Street accidents	5	2	8	2	2	0	2	1	6	1	1	2	2	1	1	2	2	1	4	1	2	1	49
Other	1	2	2	0	0	1	1	0	3	1	3	0	0	0	0	0	1	0	3	0	0	0	18
TOTALS	19	7	36	10	18	10	19	6	18	5	21	9	13	2	15	6	19	7	15	1	9	2	267

BRISTOL SCHOOL ACCIDENT SURVEY 1953

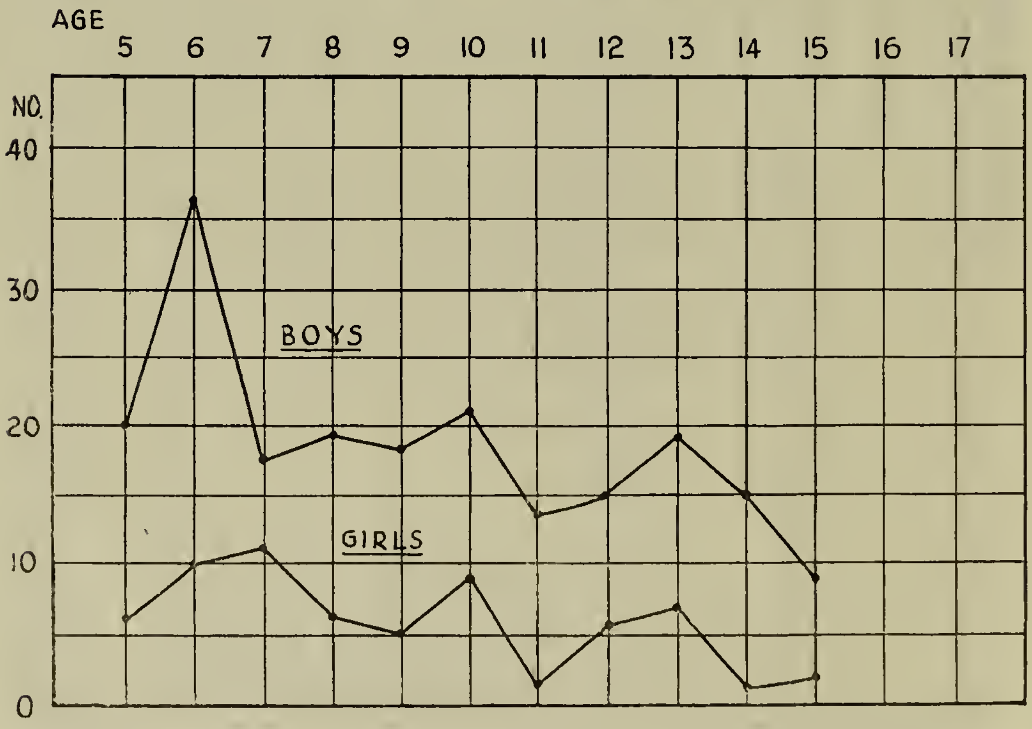
Type of injury by Occasion of Accident by Sex

Type of Injury	BOYS											Totals	GIRLS											Totals
	Playtime at school.	Games in field.	Games in playground.	P.T.	Swimming Baths.	Science Lesson.	Cooking Lesson.	Gardening Lesson.	Classroom.	Woodwork.	Other.		Playtime at school.	Games in field.	Games in playground.	P.T.	Swimming Baths.	Science Lesson.	Cooking Lesson.	Gardening Lesson.	Classroom.	Woodwork.	Other.	
Fracture, crack	25	15	–	12	1	–	–	–	2	–	3	58	11	3	4	3	1	–	–	–	–	–	3	25
Dislocation ..	5	4	1	4	1	–	–	–	1	–	–	16	1	1	–	1	–	–	–	–	–	–	–	3
Sprain, strain ..	7	2	1	6	–	–	–	–	–	–	1	17	5	4	3	7	–	–	–	–	–	–	3	22
Cut, puncture, splinter ..	57	11	3	5	2	2	–	2	17	14	26	139	19	3	3	5	–	–	–	1	8	–	16	55
Burn, scald ..	–	–	–	–	–	–	1	–	–	–	–	1	–	–	–	–	–	1	2	–	–	–	–	3
Squeezed fingers	3	–	–	–	–	1	–	–	2	–	3	9	1	–	–	–	–	–	–	–	3	–	3	7
Bruise, abrasion, bump ..	19	10	1	7	1	–	–	–	1	–	6	45	4	3	6	6	1	–	–	–	2	–	5	27
Concussion ..	2	2	–	2	1	–	–	–	–	1	1	9	1	–	2	–	–	–	–	–	–	–	–	5
Nose bleeding ..	4	1	–	–	–	–	–	–	–	–	–	5	3	–	–	1	–	–	–	–	1	–	1	6
Other	1	–	–	2	–	–	–	–	–	–	1	4	1	1	–	–	–	–	–	–	–	–	–	2
No injury found	–	2	–	–	1	–	–	–	2	–	–	5	1	–	–	–	–	–	–	–	1	–	–	2
TOTALS ..	123	47	6	38	7	3	1	2	25	15	41	308	47	15	18	23	2	1	2	1	15	–	33	157

No. of school accidents by age and sex



Ambulance Cases (all causes) in children
Jan. – April 1954 excluding school accidents.



CHILD GUIDANCE CLINIC

R. F. Barbour.

Changes of Staff

The South Western Regional Hospital Board agreed to make a joint appointment of a Senior Registrar who is to work six sessions at the Child Guidance Clinic, the remainder of his time being spent at Mental Deficiency Institutions in the neighbourhood. Dr. W. Lumsden Walker, M.B., Ch.B., D.P.H., D.P.M., was appointed to this post, starting work on September 10th, 1953.

Mrs. Jean Vant, B.A., Assistant Psychologist, left on August 31st, 1953, and was succeeded by Miss Jean Horn, M.A., Dip.Ed., who came to us from the Child Guidance Clinic, Preston on September, 1st 1953.

Mrs. Joanna Page, the Social Worker, left the Clinic on the 31st December, 1953, and her place has been filled by Miss Charity Clarke.

Annual Statistics

	1952	**1953**
Psychiatric—		
Diagnostic Interviews	334	**317**
Physical Examinations	314	**290**
Treatment Interviews	868	**1,128**
Parent Interviews	118	**131**
Others Interviewed	13	**4**
Psychological—		
Examinations including Juvenile Court cases	628	**504**
Treatment Interviews	730	**1,061**
Parent Interviews	59	**163**
Others Interviewed	21	**14**
Other visits	49	**64**
Social—		
Interviews with parents	1,288	**1,466**
Interviews with others	11	**13**
Home visits	57	**90**
Other visits	2	**1**

The question is sometimes asked whether a Clinic run by any particular body is likely to meet the needs of a whole area. In Bristol there are two Child Guidance Clinics, one established in 1936 which is under the Local Education Authority, the second started in 1946 held at the Children's Hospital, which is a branch of the Bristol Royal United Hospitals. The director of the Authority's Child Guidance Clinic is also the consultant of the Psychiatric Clinic at the Children's Hospital, but each clinic has its own psychologist /s and psychiatric social worker /s.

Thanks to the broadmindedness of the Principal School Medical Officer and the Chief Education Officer of Bristol, referrals to the Authority's Clinic are " open " ; that is, any ratepayer resident in the city can make direct use of the Clinic for his children, a doctor's letter not being insisted on, neither do cases have to be referred through the School Health Service. This policy was adopted as there are cases where a problem may be limited to the home—for instance, stealing from stepmother or sex difficulties, and it was found that parents in such cases were, not unnaturally, reluctant to disclose their private difficulties to an outside authority.

The Children's Hospital serves a wider area, there being no residential qualifications. On the other hand, a doctor's letter is essential. The Clinic at the Children's Hospital in 1953 saw 123 cases. At the Authority's

Child Guidance Clinic 317 cases were seen, of which 67 were referred by the Juvenile Court. It was decided to compare the total referral to the Hospital Clinic with the first 123 referred to the Authority's Clinic, excluding Juvenile Court cases, of which there are a particularly large number referred owing to the close liaison between Clinic and Juvenile Court.

	C.G. Clinic	*C. Hosp.*
Age 2	–	1
,, 3	1	5
,, 4	2	7
,, 5	3	8
,, 6	6	10
,, 7	15	11
,, 8	19	14
,, 9	24	19
,, 10	18	18
,, 11	17	8
,, 12	2	7
,, 13	8	10
,, 14	4	4
,, 15	2	1
,, 16	1	–
,, 17	1	–
	123	123

It will be seen that in both Clinics the biggest number of referrals are during the 10th year. There is also a small peak at the 14th year.

Sources of Referral

	C.G. Clinic	*C. Hosp.*
School Medical Officer	29	1
Education Authority	1	–
Head Teacher	51	–
Hospitals	3	–
Parents	16	–
Children's Officer	3	–
Private Practitioners	10	58
Other Agencies	10	3
Consultants at Children's Hospital	–	41
Other Consultants	–	12
Child Guidance Clinic	–	8

It will be noted that certain cases are referred from the Local Authority's Clinic to the Clinic at the Children's Hospital. This occurs in certain psychosomatic conditions where it is considered that medicine or other physical measures are desirable and one wishes the whole treatment to be integrated by one Clinic.

The problems for which the children are referred differ fairly markedly in the two Clinics. In each case the main reason for referral has been taken and tabulated according to the nomenclature suggested by the Child Guidance Council some years ago.

Various ways of gaining confidence and skill

	Bristol Children's Hospital.	*C.G. Clinic (incl. Juv. Court).*	*C.G. Clinic (excl. Juv. Court).*
Fears	14	14	17
Seclusiveness	1	2	2
Depression	1	–	–
Excitability	1	–	–
Apathy	1	3	3
Obsessions	–	1	1
Speech Disorders	11	4	4
Sleep	8	4	4
Movement	9	6	6
Feeding	3	–	–
Excretory	21	11	17
Nervous pains and paralyses	7	–	–
Fits	6	–	–
Psychosomatic	7	–	–
Unmanageable	8	18	19
Temper	4	2	3
Aggressiveness	2	8	6
Jealous behaviour	2	–	–
Demanding attention	2	1	1
Stealing	5	27	16
Lying and romancing	1	–	–
Truancy—attention	2	3	2
Sex difficulty—attention	–	2	1
Adolescent sex	–	2	2
Backwardness—attention	7	13	17
Inability to concentrate	–	2	2
Inability to keep jobs	–	–	–
Special disabilities	–	–	–

As is to be expected, at the Children's Hospital there are more referrals on account of problems such as sleep and movement disorders. When the child is older the phrase that tends to be used by the mother is ' unmanageable ', without necessarily defining precisely in what matters the child is unmanageable. It is probable that these apparent differences in symptoms are determined by the growing up of the child, but in each case the basic underlying problem is the tension between child and mother.

At the end of the year, seventeen maladjusted children were being maintained in various residential schools and hostels as follows :—

	Boys	*Girls*	*Total*
Aymestry Court Special School	1	–	1
Bodenham Manor School, Herefordshire	–	1	1
St. Peter's Residential School, Leeds	–	1	1
St. Andrew's School, Bridgwater	1	–	1
The Sutcliffe School, Winsley, Som.	3	–	3
St. Francis School, Hooke	1	–	1
Chaigley School, Thelwall	1	–	1
River House School, Henley-in-Arden	2	–	2
Southfields Hostel, nr. Ilchester, Som.	3	–	3
High Canon's School, Stroud	1	–	1
St. Catherine's School, Almondsbury	1	1	2

CHIROPODY CLINIC

L. Tasker.

There was a small reduction in the number of treatments in 1953—3,777 as compared with 3,848 in 1952. New cases were slightly more numerous at 896, including 15 from Nursery Schools, against 833 last year.

The number of Plantar Warts increased from 581 to 654 (2,475—treatments). Other groups remained approximately the same as other years.

During the year about 30 cases were referred to the Orthopædic Department for operation or physiotherapy.

The following is a summary of treatments given during 1953.

	First	*Other*
Metatarsalgia	3	8
Hammar Toes	10	77
Plantar Warts	654	2,475
Pes Cavus	4	1
Tarsal Strain	22	67
Hallux Valgus and Rigidus	9	32
Miscellaneous	194	221
	896	2,881

DEATHS OF SCHOOL CHILDREN

A. L. S.

The following table gives the figures of deaths occurring amongst school children during the year and has been provided by the Health Department from the returns of the Registrar General. This corresponds to a death rate of ·43 per thousand school children, which is the same figure as in 1952. Accidents, particularly motor accidents, are still responsible for a large proportion of the deaths and emphasises the need for a continuance of road safety measures.

Cause	*Boys*	*Girls*
Generalized tuberculosis	–	1
Cancer	–	1
Leukaemia	1	3
Rheumatic heart disease	–	1
Pneumonia	1	2
Congenital malformations	2	–
Other disease	3	3
Motor accidents	4	2
Other accidents	2	1
	13	14

DENTAL CLINICS

W. H. B. Stride.

The dental staff remained at eight full-time officers until the beginning of November, when it was reduced to seven by the death of Mr. A. L. Morgan, who had devoted himself to this work since the end of 1924. His death is a big loss to the service.

The number of sessions given by part-time practitioners averaged eleven a week up to the end of the year, and Mr. Hazell continues to give three sessions a week by arrangement with the Regional Hospital Board.

The number of primary and secondary school children inspected in the schools during the year was 40,917, as against 36,059 last year, and the number treated was 23,759 as against 23,553 last year ; in addition 840 nursery school children were inspected, and 242 received treatment.

The school population had increased to 62,495 by December and the only staff to deal with this large number was the equivalent of eight full-time officers. It was hoped that by this time it would have been possible to make some full-time appointments, and that part-time practitioners would have supplied the rest of the help needed.

It seemed quite likely that when the amendment to the National Health Service Act was passed, private practice would be somewhat less attractive and as a result some dentists would turn their minds to schoo dental work. But in only one case has an application been received from a private practitioner, and in this case the starting salary was so inadequate that the application was withdrawn. This is far from satisfactory, and what is desired is that it shall be possible to offer to a suitable candidate whatever position on the scale is commensurate with his experience and suitability to undertake this priority work.

The Local Dental Committee have made every effort to advertise our need for part-time sessions. What is taking place under the National Health Service Act now that dentists are no longer so over-loaded with the treatment of the adult population is that the school child is a more acceptable patient to an increasing number of practitioners. Whilst in the past many parents took their children occasionally, and that usually in emergency to a private practitioner, all that was done was the absolute minimum, and usually meant the removal of the offending tooth. Now that school children are the only section of the population who are able to be given free treatment, many parents are asking their dentists to treat the children regularly and more and more mouths are seen where conservative treatment for the permanent dentition is being carried out regularly and often some conservative treatment of the deciduous dentition is carried out as well.

It is essential to discover why more recruits are not coming forward to take up this priority work. In the past the inadequate salary was a real obstacle to obtaining dentists who found private practice much more attractive. The work should offer many inducements to those willing to undertake the treatment of children with its many difficulties, but also great compensations, once the confidence of the children has been gained. It is certain that part of the trouble lies in the fact that the students and even staffs of the teaching hospitals have entirely erroneous ideas of the conditions under which the work is done, and the arrangements at the clinics and health centres.

Granted that at one time work had to be carried out in old buildings, often poorly lit, and fitted up with oldish equipment. Now, as each new clinic is opened, the surgeries are fitted with modern electric equipment, well lighted, and made as attractive as possible.

When it is realised that medical students are in touch with the health service all through their training, and as part of their work visit all departments, including the dental section, it is difficult to see why dental students have no opportunities to do this. In their case it is of real importance to give them the opportunity of seeing the conditions under which the school dental work is carried out.

The clinics should be open-house to dental students at any time during their training to come and see this side of the work, and the link need not be broken when a newly qualified dentist accepts an appointment under a Local Authority. Facilities should be given to keep in touch with the teaching hospital.

It is now possible to report the appointment of an oral hygienist. Miss J. Wells was appointed in January and has now joined the permanent staff. Treatment has been given to 367 children and 189 mothers, and 1,050 scalings have been carried out. This side of the work is found to be of increasing value, and the instruction in oral hygiene is often of greater importance than the actual treatment given, which may be merely polishing the teeth. It is found that during childhood some children's teeth are always stained in spite of their fairly regular brushing, giving them the impression that their efforts to look after their teeth are a waste of time. They learn to realise the value of regular visits to the hygienist by the improved appearance of their teeth, and also that once the stain is removed it is easier for them to prevent its recurrence.

The periodic re-examinations were continued during the year of children who had been treated by local application of fluoride.

The number of accidents to incisor teeth of school children is very surprising and whilst in some cases conservation is possible, in other cases the teeth are eventually lost and a denture has to be supplied. Altogether 225 dentures have been supplied, during the year, 86 to school children, 139 to mothers.

Two hundred and seventy-seven X-rays have been taken for orthodontic diagnosis, difficult extractions, buried roots, etc., 247 for children and 30 for mothers.

The arrangements commenced in October, 1947, whereby a number of Bristol school children are inspected and treated by the Department of Children's Dentistry at the Bristol Dental Hospital were continued during the year.

The figures relating to the children dealt with in 1953 are as follows :

	1953
Number of cases inspected	1,072
Number needing treatment	918
Number of new cases treated	366
Number of others treated	844
Total attendances	1,210

Orthodontic Clinic

The arrangements for children requiring orthodontic advice and treatment continued as in former years. An orthodontist from the Bristol Dental Hospital attends at the Central Clinic on one session per week for the purpose of diagnosis, the cases being presented by the Principal Dental Officer. Any children requiring fixed or removable appliances are referred by the Orthodontist to the Dental Hospital for treatment. The greatest importance is attached to the service because children in need of advice should be seen at early ages when treatment has the best prospect of a good result. The fact that parents appreciate this service is seen by the high percentage accepting the invitation to attend the orthodontic sessions. In some instances simple treatment, such as the extraction of teeth and exercises, can reduce or cure the abnormality and such children can be dealt with by the clinic service and do not need to be referred to the Dental Hospital for more elaborate treatment. Details of the work of the diagnostic orthodontic clinic during the year are as follows :—

	1953
Number of new patients	539
Number of attendances	929
Number referred to Dental Hospital	334
Number completed	69

EAR, NOSE AND THROAT SERVICE

G. R. Scarff.

Aural Clinics

During the past year the number of children suffering from aural defects attending the clinic was 275 (including 17 pre-school cases and 7 nursery cases). Out of a total of 255 new cases of middle ear suppuration found at school medical inspection, 88 failed to clear up with a few weeks' routine treatment at the minor ailment clinic and were therefore referred to the aural clinic. Only 16 of these cases were attending at the end of the year.

Owing to the incidence of a moderate epidemic of poliomyelitis no cases have been admitted to the Ear, Nose and Throat ward at Ham Green for operation during the latter half of the year and the waiting list for these cases has therefore risen. It is however hoped to re-open this ward in the spring.

Since my last report a teacher of the deaf has been appointed for the purpose of visiting schools to give tuition in lip-reading to children who are moderately deaf, but who can with the help of a hearing aid receive instruction at ordinary school. At present there are 30 of these children whose ages vary from 7 to 14 years, the cause of their deafness being :

otitis media (9 with a history of chronic middle ear suppuration)	12 cases.
congenital nerve deafness	9 cases.
catarrhal deafness with secondary nerve deafness . .	6 cases.
acquired nerve deafness (following whooping cough, measles and encephalitis respectively).	3 cases.

It is considered that these children should receive lip-reading tuition as this tends to give them greater confidence, will make them independent of their aid to a considerable extent, and will stand them in good stead in later life when their hearing will inevitably further deteriorate and lip-reading will be a faculty much less easy to acquire.

EMPLOYMENT OF CHILDREN

H. Bingham.

During the year ended 31st December, 1953, one child was medically examined and found fit to be employed in entertainments.

Appointments were made for 795 children to be medically examined as prospective employees. Of these, 766 were certified fit and 6 unfit, while 23 failed to keep appointments for examination.

Employment was divided into the following categories :—

Trades	Boys	Girls	Total
Newspapers	595	53	648
Butchers	11	–	11
Grocers	29	–	29
Dairies	3	–	3
Bakers	1	–	1
Greengrocers	2	1	3
Mannequins	–	8	8
Multiple Stores	–	55	55
Libraries	–	2	2
Others	2	4	6
TOTAL	643	123	766

ENURESIS CLINIC

S. W. Terry
J. E. Kaye

The work of the Enuresis Clinic was continued during 1953. For most of the year five sessions, instead of four, were held each week. To some extent the increased number of sessions has cut down the length of the waiting list, and it has also been found possible to see individual cases at shorter intervals, thus making for smoother running and more regular attendances.

During the year 302 patients have been under treatment and observation: of these 150 were new cases. The old cases are survivors of previous years, 97 having commenced treatment in 1952, 40 in 1951 and 15 in 1950. Not all the children are receiving active medical treatment, for a child is usually kept under observation for a period varying from three to six months during which, should enuresis relapse, therapy can be instituted without delay.

Of the 302 children under review, 127 were girls and 175 boys, i.e. a ratio of 5 : 7. The age distribution is shown in the accompanying diagram. During the year 52 children were discharged as cured, while 66 discontinued treatment; many were reluctantly discharged as they failed to keep repeated appointments. Four others were discharged at their parents' request, and seven children ceased attending the clinic on leaving school. Sixteen children were referred to the Child Guidance Clinic.

Despite all the work that has been done on the problem of enuresis, the pathogenesis remains obscure, at least, different workers, approaching the problem from particular angles, find either varied probable causes or equally fascinating associated conditions. Nevertheless, there is reason for optimism that a solution will be found. Meanwhile something can be done for the unfortunate enuretic child and his family. Treatment, of necessity, is varied and often speculative, with, in consequence, a big demand on the parent and child in terms of time and patience. Besides the exhibition of a placebo and members of the anti-histamine group of drugs, much can be done by way of improvement in the child's general health, the reassurances of both parent and child, the adjustment in the child's sleeping habits and (where it is convenient and practicable) environment, the restoration of an adequate and physiological fluid intake (for too often the quantity of fluid allowed to a child is drastically restricted in a vain and futile attempt to limit micturition at night), and, lastly, by advice to spare the child unnecessary serious punishment and unhappiness engendered by an unwholesome and unreasonable attitude to an unfortunate condition. Further, in those particular cases where a deep psychological cause is probable children can obtain therapy at the Child Guidance Clinic. Here we wish to record our gratitude to Dr. R. F. Barbour, the Director of the Child Guidance Clinic, for his help and advice throughout the year. Our thanks are also due to the staff of the Clinical Pathological Department of the British General Hospital for examining and reporting on the specimens referred to them.

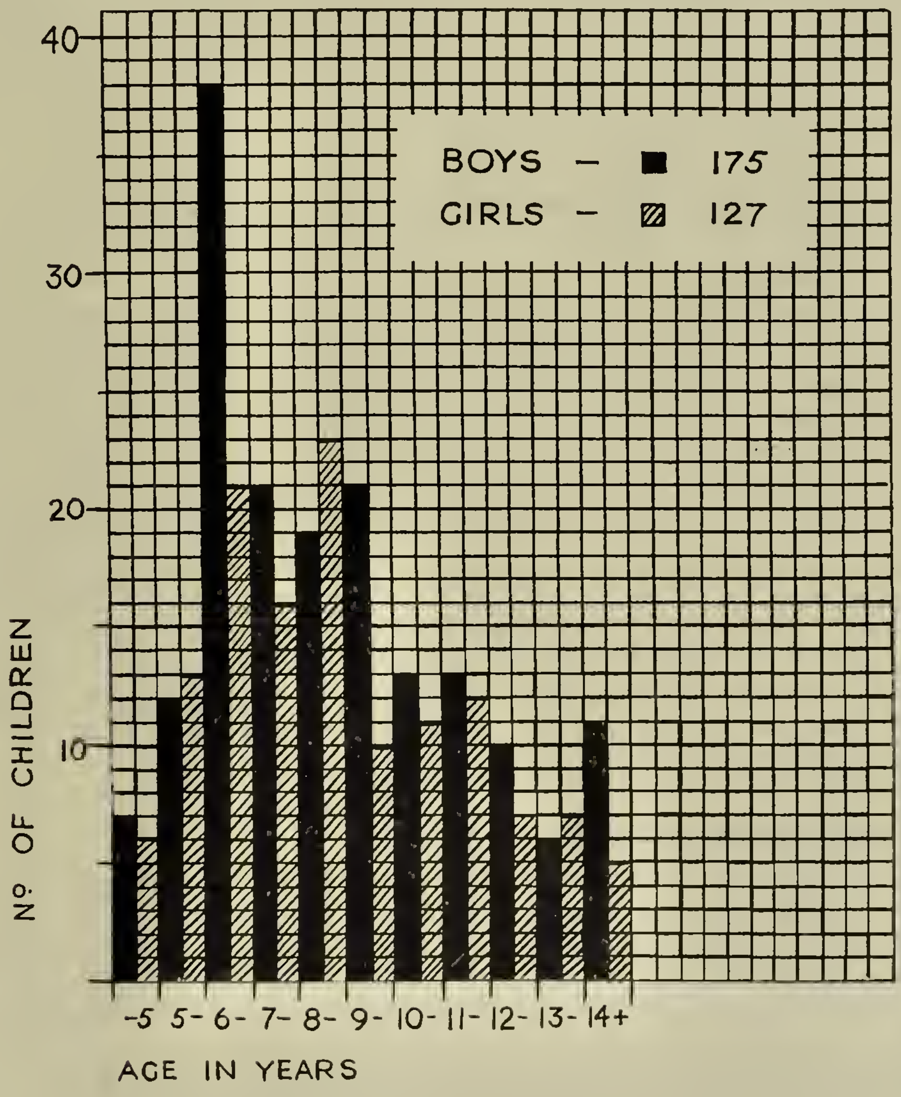
The following details are offered bearing on the family background of enuretic children in the hope that they may be of interest. Apart from the high incidence of enuresis in blood relatives there is no feature of particular significance. Percentages are given in brackets.

Patients		The Family				Total Children		Family History of Enuresis
Sex	No.	Only Child	Only Child of that Sex	First Child	Last Child	Boys	Girls	
Boys	88	11 (12·5%)	24 (27·3%)	27 (30·7%)	26 (29·5%)	185	84	36 (40·9%)
Girls	59	6 (10·2%)	30 (50·8%)	18 (30·5%)	14 (23·7%)	77	102	31 (52·5%)
Total	147	17 (11·6%)	54 (36·7%)	45 (30·6%)	40 (27·2%)	262	186	67 (45·6%)

For those interested in the working of an appointment system, especially where, by and large, for all save the first appointment, the parent is given the choice of time and date (the appointment being duly confirmed by post) the following details are offered (percentages are in brackets).

	Tuesday		Friday		Saturday		Total	
	Invited	Attended	Invited	Attended	Invited	Attended	Invited	Attended
New cases . .	49	40(81·6%)	47	32(68·1%)	36	21(58·3%)	132	93(70·6%)
Old cases . .	421	317(75·6%)	309	242(78·3%)	346	277(80·1%)	1,076	836(77·7%)
TOTAL . .	470	357(75·9%)	356	274(76·9%)	382	298(78·0%)	1,208	929(76·9%)

CHART SHOWING AGE DISTRIBUTION OF CHILDREN SEEN



EYE CLINICS

R. R. Garden.

In 1953 the total number of refractions completed at the clinics was 4,536, including 4,520 cases sent from Primary, Secondary and Special Schools and 16 from Nursery Schools. Of this total, 845 did not require glasses.

The number of refraction sessions held during the year was 506 ; spectacles were ordered for 2,197 children (16 from Nursery Schools), and by the end of the period 1,866 pairs had been obtained.

Cases of external eye disease made 3,562 attendances for treatment.

The total of squint cases notified and investigated was 208, of which 75 came from Infant Welfare Centres, 15 from Nursery Schools and 118 from other schools. As in previous years, much time is devoted to prevention of visual loss resulting from concomitant squint, this work being carried on mainly at the Orthoptic Clinic of the Eye Hospital, and also in the special consultation sessions held on most weeks by the writer of this note. To the latter clinics are also referred difficult cases for diagnosis and for advice about treatment or education. Those requiring further investigation are transferred to the Eye or other hospital out-patient departments. Squint cases who need surgical correction are entered on the Eye Hospital lists ; last year 98 operations for this deformity in Bristol children were carried out there.

HANDICAPPED CHILDREN AND SPECIAL SCHOOLS

Blind Children

A. L. S.

In the revised School Health Service and Handicapped Pupils Regulations issued by the Ministry in August some relaxation of the arrangements for the education of blind children was made. Hitherto it had been a requirement that all blind children should be educated in a boarding school. Under the new Regulations blind children must now be educated in a special school (as either day or boarding pupils) unless the Minister otherwise directs. This relaxation is welcomed by this Authority as, owing to the fact that Bristol has within the city the Royal School of Industry for the Blind, there has always been a number of parents who prefer their children to attend as day pupils rather than boarders. There were 19 children attending this school at the end of the year, 11 boarders (8 boys and 3 girls) and 8 day pupils (5 boys and 3 girls). At the end of the year 1 girl was also being maintained at the Royal Normal College for the Blind, Shrewsbury, and 1 girl at the Sunshine House Nursery, Leamington Spa.

Partially-Sighted Children

As explained in the Report for 1952, these children now form a unit occupying a separate three-room hut at the Authority's day open-air school. One room in this hut is used for the purposes of the open-air school. Since the survey of 1950 nothing has emerged which would cause the Local Authority and others concerned in the care of partially-sighted children to modify their opinions as to the number of children requiring special educational treatment because of this defect. The difficulties, however, of teaching this small number of 16 children are great and practically each child has a separate problem of his own. The principal cause why certain children who are partially sighted cannot succeed in the ordinary school is social rather than physical in character, i.e. the children fail to adjust themselves to their handicap and become in need of special educational treatment from this cause. This means that very close watch has to be kept on the progress of the children so that they may, if possible, return to the ordinary school when their social adjustment is reasonably good. In the case of some children whose home conditions are unfavourable it is necessary sometimes to recommend treatment at a residential special school, and at the end of the year three children were attending the West of England School for Partially Sighted Children at Exeter. Two severely partially sighted girls are also attending the Chorleywood College for Blind and Partially Sighted Girls in Hertfordshire.

Deaf Children

The Authority's day school for deaf children at Elmfield has been full throughout the year. The waiting list is very small indeed and usually consists of only one or two children of the age of 2 or 3. It is gratifying to report that during the year a girl obtained a place in the Mary Hare Grammar School, Newbury. This is the first grammar school placement for a number of years. There are proposals to acquire from the Housing Committee the premises at Elmfield and to make certain structural alterations and additions to the property so as to increase the accommodation slightly, and to make better provision for the children in the way of dining-room and space for physical education. During the year the opportunity has been taken to enlarge the horizons of the children at Elmfield and to increase their contact with other children by attendance at neighbouring schools for craft work, cookery, etc.

The number of children on the registers at the end of the year was 58 (28 boys and 30 girls) (including 2 girls from other Authorities). Of these 4 boys and 2 girls were severely partially deaf. There were also 6 children at residential schools for the deaf as follows :—

	Boys	*Girls*	*Total*
Mary Hare Grammar School, Newbury ..	–	1	1
Mill Hall (Independent) School, Cuckfield, Sussex	–	1	1
Royal School for Deaf, Birmingham	1	1	2
West of England School for Deaf Children, Exeter	–	1	1
St. John's Institute, Boston Spa	1	–	1

Partially Deaf Children

Mention was made in the report for 1952 of the arrangements which are being made to provide for the needs of partially deaf children in ordinary schools by the appointment of a peripatetic teacher of the deaf to visit schools and give lip-reading tuition. This teacher was appointed and commenced duty in March, 1953. Altogether 35 children were visited (16 in the junior and infants' schools, 16 in secondary modern schools, 2 in special schools and 1 in a grammar school). During the period 1 boy and 1 girl reached school-leaving age and found suitable employment. One boy was transferred to Needwood Hall Residential Special School for partially deaf children, and one boy has been found to be ineducable and was reported to the care of the Mental Health Service. Two girls have made sufficient progress as not to need further help and have been discharged from further lip-reading tuition. The remaining children are being visited regularly and are making satisfactory progress.

Hearing Assessment Clinic

At the request of the consultants who were concerned about the difficulty of the diagnosis of deafness, especially in very young children, a hearing assessment clinic was commenced in September, 1952, at the Bristol General Hospital. Sometime before this, arrangements for Peep Show assessment had been instituted, but this proved to be by no means as satisfactory as had been hoped. Pure tone audiometer assessment is extremely difficult if not impossible in the case of children who have no speech and therefore cannot understand what is required of them. This clinic, which is conducted by the Head ot the School for Deaf Children and a Psychologist especially interested in the problems of deaf children, is held on the premises of the General Hospital and is, we believe, unique in the services for the care of deaf children. Very early on, it was realised that children were being referred to the clinic who had a quality of backwardness as a dominant element and it appeared in some cases that the backwardness was the sole factor which caused the lack of development in speech. The policy now, therefore, is to ask for a psychological assessment of all children referred to the clinic and this assessment is carried out by the psychologist for the area in which the child lives. This opinion, with other particulars, is filed in the department of the Bristol School Health Service and is available when the child is summoned to the clinic. In the case of Bristol children, an appointment is made for them to see the psychologist who attends the Deaf Assessment Clinic before an appointment is made for attendance at the Clinic. In this way the children become more familiar with one of the team and it is possible to form an assessment of their ability in more favourable circumstances.

Assessment

M. Sharwood

Children referred to this clinic are seen by one of the Authority's Educational Psychologists and myself. The aims of the clinic can be defined as follows :—

(*a*) Ascertainment of Deafness and Partial Deafness.
(*b*) To advise mothers of children who are totally or severely deaf on home training, particularly during the pre-school period.
(*c*) To advise re treatment of partially deaf children.
(*d*) To recommend educational treatment or psychological investigation of cases referred to the clinic.

Medical and otological reports are available for reference, also audiograms. The atmosphere at the clinic is friendly and aims at winning the child's confidence and obtaining his co-operation. Each child is seen individually, the amount of time given to a child and mother at each visit is between 30 and 40 minutes.

In the testing of hearing of a young child a succession of attractive play material is used, and can be manipulated in various ways. The aim is to train the child to use the apparatus in a particular way in response to sound, e.g. to take a reel off its peg, or to fit in a cylinder, etc.

The following is the type of test used to ascertain the child's hearing acuity :—

(*a*) Percussion sounds—a drum, a cow-bell, whistle, etc.
(*b*) The voice using the word " Go ".
(*c*) Sample vowels.
(*d*) Sample consonants.

The test is given behind the child's back ; if he hears the sound he manipulates the apparatus in a certain way as shown by the helper. The test is given at the following distances :—

6 ft., 3 ft., 1 ft., or within 4 ins. of each ear.

In the case of children having some hearing the type of test used is :—

(*a*) Commands and conversation.
(*b*) Vocabulary test ; child pointing to the pictures as he hears the names.
(*c*) Voice.
(*d*) Sample vowels.
(*e*) Sample consonants.
(*f*) Pitch pipes, if available.

The tests are given in mf, f, or ff voice at varying distances behind the child's back :—

(i) without a hearing aid.
(ii) with a hearing aid.

Recommendations. The child's response to sound is recorded by one of the helpers and educational treatment recommended according to the results. Children who appear to hear and whose speech development has been prevented or hindered through other factors are referred for psychological investigation. In this work of testing and in the general running of the clinic, the example and leadership of the work of Professor and Mrs. Ewing of Manchester University have been of the greatest assistance.

Two pamphlets of practical advice and help for parents of young deaf children are distributed at the clinic :

(*a*) *Is your Child Deaf ?* by Irene Ewing, O.B.E., M.Sc., D.C.L., and Alex Ewing, M.A., Ph.D.
(*b*) *What the Mother of a Young Deaf Child can do*, by Margaret Martin.

Total number cases referred during 1953	19
Bristol cases	14
Other Cases	5

Types of cases referred :

(1) Severely Deaf.
(2) Partially Deaf.
(3) Aphasic.
(4) Children whose speech development has been prevented or hindered through other factors (e.g. emotional disturbances —low mental ability).

Summary of Recommendations made :—

(1) Recommended for admission to School for Deaf ..	5
(2) Recommended for admission to School for Partially Deaf	3
(3) Recommended to remain in normal school	3
(4) Recommended that child be sent to Residential School with hearing children because she has deaf parents	1
(5) Cases for further investigation	5
(6) Impossible to test owing to low mental ability ..	2

Age range of children seen : 2—10 years.

Types of Cases referred to the Clinic

Case I

Annette—age 6 years. Referred from the Children's Hospital.

History : Convalescent from T.B. Meningitis. Has bilateral nerve deafness, as the result of prolonged streptomycin therapy. No previous school or very little.

Speech : Chatters normally, but speech is becoming indistinct.

Test of Hearing :

(*a*) Percussion sounds—appeared to hear these at distance of 3 ft.
(*b*) Voice—appeared to hear ff voice close up.
(*c*) Words and conversation—no response.

Conclusion—very severely deaf.

Recommendation—should have the help of a teacher of the deaf as soon as possible to teach her lip reading and to help keep up her speech.

(A hearing aid was tried—there was some response but she did not appear to recognise the words through it. Auditory training needed.)

Case II

Jacqueline—age 3 years. Referred by Mr. Scarff.

History : Appears to be severely deaf—congenital.
Hereditary—maternal side.

Speech : Mother states that she tried to say odd words, e.g. tar, mummy.

Behaviour : Mother finds her difficult to handle and is anxious to get her to school.

Test of Hearing :

(*a*) Percussion sounds—responded to drum and whistle—turned her head.
(*b*) Voice ff at 1 ft.—turned but could not locate, mf at 1 ft.—no response.
(*c*) Own name ff—no response.

Conclusion—appears to be severely deaf.

Recommendation—School for the Deaf—to be admitted as soon as possible. Mother invited to visit the Bristol School for the Deaf with her child.

Case III

John—age 7 years. Referred by School Medical Officer.

Attends Junior Mixed and Infants' School.

Report from Head of School—" An intelligent boy making fairly good progress, but there appears to be some degree of deafness.

Hearing Test :

(*a*) Conversation and commands—mf voice at 4 ft., not sure beyond this.
(*b*) Vocabulary test—could pick out words 3—4 ft., mf voice—not certain beyond this.
(*c*) Vowels—mf voice 3 ft.
(*d*) Consonants unvoiced—s, sh, p, t, etc., 2 ft.—not sure beyond this.

Conclusion—Partially Deaf.

Recommendation—To be seen by the peripatetic teacher of the Partially Deaf. Recommended issue of Hearing Aid through Mr. Scarff and periodic audiogram.

Educationally Sub-Normal Children

A. L. S.

The Authority's three day special schools for educationally sub-normal children, Russell Town (Senior Boys) 140 places, The House in the Garden (Senior Girls) 100 places, and Newfoundland Road (Junior Mixed) 80 places have been full throughout the year. As I mentioned in the report for 1952 the problem of accommodation mainly centres on the junior E.S.N. children and this question has been receiving much attention. Endeavours have been made to increase the special educational provision for this group by providing some special classes in ordinary schools. Towards the end of the year additional classes were set up at Easton Road, Embleton Road and South Street Schools and as many as possible of the children in attendance at the junior E.S.N. school who live in the areas of those schools were withdrawn from the special school and placed in the new classes. Unfortunately it is true that two of the new classes are in areas where the population is diminishing, and areas where there is often greater need are unable to provide the facility of special classes because of the demand for places for ordinary children. Two areas which are thus not so well served are those of Southmead and Bedminster.

During the year arrangements were made to set aside at Newfoundland Road Special School a unit for a small group of children of the kind who are on the border line of educability and placed there to assess their full capabilities under school conditions. In many cases these children have been denied the experience which more normal children have had, the lack of which had conduced to their backwardness. In some cases they have come to school late because of some unfortunate social characteristic, such as soiling, and they have failed to fit in with the ordinary stream of E.S.N. children. In some few cases physical handicaps have also complicated the situation, e.g. some mongol children have been admitted for trial periods. One child with gargoylism was admitted but children with physical handicaps are not commonly recommended for admission. The institution of such a unit is felt to be highly desirable so that these children should have a trial under the best possible conditions before being declared ineducable. It is unfortunately true that this particular school has about the least satisfactory environmental conditions in which to carry on this work. It is urgently desired to house the school in a modern building in more open surroundings.

The purchase of the premises of the Authority's residential special school for senior boys at Kingsdon Manor has enabled the proposed extensions to be put in hand and these were completed during the year. A new wing was built conforming in style with the general architecture of the old building, providing three additional classrooms with a large dining-cum-day room. Additional washing and lavatory provision was made with improved heating and kitchen arrangements. These extensions have enabled the accommodation of the school to be increased to 60 boys. As a result of the initiative and enthusiasm of the staff and the boys a swimming bath 50 ft. long and 20 ft. wide was excavated in the grounds of the school. Some professional help was needed to complete the concreting and painting but great credit is due to the staff and the boys for their help in providing this valuable amenity. It was decided not to install a filtration plant but arrangements have been made for the chlorination treatment of the water by an additive process. The bath was fully used by the boys, who thoroughly enjoyed their exercise, and by the end of the summer all except two or three of the boys were able to swim. The provision of the bath is bound to prove a very great help in the care of the health of the boys.

For special reasons a small number of E.S.N. children are placed at independent schools, and at the end of the year 19 children were being maintained in such schools as follows :—

	Boys	*Girls*	*Total*
Spring Hill School, Ripon	1	–	1
All Souls' R.C. Special School, Middlesex	–	1	1
Besford Court R.C. Residential Special School, Worcestershire	3	–	3
St. Christopher's School, Bristol (Day Pupils)	5	2	7
St. Christopher's School (Resident Pupils)	2	2	4
Camphill Rudolf Steiner School, Aberdeen	1	–	1
The Sheiling Curative School, Ringwood	–	1	1
Crowthorn Special School, Edgworth, Lancs.	1	–	1

During the year 69 children were referred to the Local Health Authority for the purposes of the Mental Deficiency Acts ; 31 under Section 57 (3), 3 under Section 57 (3) and (4), and 35 under Section 57 (5) of the Education Act, 1944. In addition 59 educationally sub-normal children who left school during the year were referred to the After-Care Officer for Handicapped Children for supervision after leaving school. Thirty-seven of these children had been attending special schools and 22 had been attending special classes in ordinary schools.

Delicate and Physically Handicapped Children

Periton Mead Residential Open-Air School

B. J. Boulton.

After some delay, the building extensions were completed in the autumn of 1953, and were in use during the latter half of the term. These include a fine new classroom and extra dormitories. A further 22 children can now be accommodated giving a total of 59 places. Extra provision has been made for the isolation of children who may contract illnesses of an infectious nature.

With the additional accommodation, it is hoped to be able to provide for a certain number of children for short term stay in addition to those staying for the conventional six months. Obviously such a policy has to be followed with discretion since it may lead to an unsettling of the stable character of the school. To assist with this larger number of children it is hoped to strengthen the staff by the appointment of an Assistant Matron with some nursing experience.

The school is situated in a large modern house on high ground on the outskirts of Minehead, and the climatic conditions are ideal for the recuperation of delicate children. The accommodation at the school includes ample space in the grounds for outdoor activities, games, dances, etc. It is obviously desirable that a school of this nature should be fully utilised during the summer months and it is proposed that in the August of 1954 the school will be closed for three weeks only instead of the usual six weeks.

The number of children on the registers of this school at the end of the year was 46 (25 boys and 21 girls).

South Bristol Day Open-Air School

B. J. Boulton.

(*a*) *Delicate Children.*

There have been no major changes in the organisation of the school during the last 12 months. As in the previous few years, the majority of the new cases admitted have been suffering from respiratory disease. There has been no falling off in the number of cases of asthma put forward for consideration. Whatever other benefits they may derive from moving from the Ordinary School to the Open-Air School, an important consideration is that they cease to cause their classmates alarm, and no longer arouse unhealthy interest in their disability.

There is a tendency to retain children at the School somewhat longer than was the practice previously. We find that the most marked progress frequently takes place during the second year of treatment. We have continued our practice of transferring suitable cases to the Residential Open-Air School at Minehead.

(*b*) *Physically Handicapped Children.*

There has been no difficulty in filling any vacancies in this department. A number of children at present on home tuition are awaiting admission. Most of the severely handicapped children who came to the school earlier in the year have managed to maintain their places with the help of the special taxi transport service.

During the coming year it is hoped to commence work on a small physiotherapy unit at the school. It is gratifying to find that so many physically handicapped children are able to secure gainful employment after leaving school.

A. L. S.

A class for severely handicapped children will shortly be set up mainly to accommodate children suffering from poliomyelitis as a result of the epidemic of 1950. One of the problems that presents itself is that a number of these children are found to be unable to get about and have to be moved in wheel chairs. In the case of small children the problem is obviously less than in the case of children over the age of 11. With these severely handicapped children twenty per class seems to be too many for any reasonable arrangements, and we are thinking of providing in future for three classes of fifteen rather than two classes of twenty, though some rearrangement will have to take place before this can be done. With so many severely handicapped children it has been necessary to carry out some minor modification to the structure, such as ramps to allow the wheel-chairs to be easily wheeled into the rooms. Certain additional items of equipment are being supplied, such as a small trolley to take six children around at one time, and extra long beds for the older children. The structure does not lend itself to easy modification, being a former isolation hospital, and it is felt that the physically handicapped children lead a spartan life here in view of the vagaries of the British climate which have to be endured to get from one part of the building to another. Physiotherapy is at present given only on two half-days per week, but it is proposed to increase this provision to one session per day. It is hoped next year to make available in the administrative block three rooms for the nurse and doctor and to use the present medical room for physiotherapy. The practice hitherto observed of periodic bathing the children has now been declared to be unnecessary and stopped, and it is now only carried out in the case of obvious need.

Home and Hospital Teachers' Service

L. S. F. Bone.

It gives much pleasure to report that the work of providing some amount of schooling for those children who are home-bound or who are in hospital for lengthy periods has continued throughout the year without interruption. From the educational viewpoint there are several difficulties to be found in the work and possibly the greatest single cause for concern on the part of the peripatetic teachers is the amount of time which, of necessity, has to elapse between their visits to the individual children, especially the younger ones. It is, therefore, greatly to the credit of these two teachers that their enthusiasm and wholehearted interest continue unabated. That their visits to the homes are eagerly awaited is very clear to any who accompany them and a sincere word of thanks should be given to the parents who often have to make considerable sacrifice of time, money and convenience to accommodate the teachers on their visits and to aid the children in work of an educational nature between those visits.

At the 31st December, 1953, the total number of home-bound children being visited was 26—15 boys and 11 girls. 20 were of primary and 6 of secondary school age. Approximately 1,750 lessons were given in the homes during the year, and, in addition, 39 visits were made to children in the various hospitals of the City and rather more than 90 individual lessons given to those children.

In the course of the year 29 children were placed on the list for home visits and 21 removed. Of the removals, 20 were admitted to ordinary or special schools and 1 became of school-leaving age.

During the five years since the scheme for home teaching was inaugurated 132 children have been given lessons in their homes and a further 79 have received tuition in the City's hospitals.

It was thought that it might be of interest to list the nature of the children who were receiving home tuition at the end of the year. These were as follows :—

K.A.	28. 6.47.	Hydrocephalus. Believed of normal intelligence but has severe defect of vision.
I.B.	15. 8.47.	Asthma ; rarely free of attacks. Normal intelligence.
R.B.	14. 8.46.	Amyotonia Congenita ; much deformity of spine, thorax and hips.
I.C.	27. 2.45.	Severe A.P.M. Back, neck, both arms and legs affected. Intelligent.
J.C.	3. 6.39.	Epilepsy ; petit mal started when 6 ; major fits since 1952. Mentally retarded.
M.E.	6. 6.47.	Arthrogryphosis multiplex congenita. Unable to walk.
G.F.	27.10.47.	Congenital heart disease with cyanosis and physical inferiority.
R.G.	25. 3.46.	Severe cerebral degeneration—little power in arms or legs.
J.H.	31.12.44.	Severe Bronchiectasis. Highly intelligent.
L.J.	–. 5.48.	A.P.M.
R.J.	11. 2.44.	Ulcerative colitis—excluded temporarily from O.A.S.
C.M.	27. 5.43.	Haemophilia with frequent exacerbations—frail boy.
R.M.	18. 7.38.	Haemophilia. Brother to above but symptoms not so severe.

B.M.	18. 5.47.	Colostomy for imperforate anus.
G.M.	27. 3.48.	Osteogenesis imperfecta. Has broken bones many times.
S.M.	18.12.46.	A.P.M. Sub-luxation of left hip.
I.N.	23.12.44.	Progressive muscular dystrophy.
M.P.	12.12.45.	Rheumatic carditis ; considerable degree of cardiac failure.
P.W.	19.12.47.	Congenital dislocation of hip.
A.A.	16. 5.42.	Epilepsy ; on waiting list for Lingfield Special School.
V.C.	12	Rheumatism ; will probably resume attendance at Ordinary school later.
J.M.	12	Arthritis of hip.
G.R.	7.10.44.	T.B. knee.
K.W.	21. 1.47.	A.P.M.

In addition two children were being given lessons in hospital.

Some of these children are due to go to the Day Special School for Physically Handicapped Children later when some reorganisation has taken place. Others will be accommodated in a new unit for physically handicapped children.

While it is true that severely handicapped children who would otherwise be home bound could benefit a great deal by contact with other children and the wider interests that could be given by attendance, even for a short period each day, at an ordinary school, there are certain disadvantages which ought to be borne in mind. A wider contact with other children does mean a greater contact with various infections, and a handicapped child with lessened power of resistance would be more likely to become infected. Most teachers very reasonably have serious doubts and fears about the risks to which these children are likely to be subject in the ordinary school ; there are known, for instance, to be four children in the city with haemophilia, two of whom are home bound. These children admittedly could often be accommodated in the primary schools without serious difficulty, but when they get to the age of eleven a secondary modern school is apt to be unfavourably disposed towards the idea. After children have been accepted in the ordinary schools there may be difficulties with the parents if it is later decided that the child should be admitted to a special school.

Diabetic Children

In the new School Health Service and Handicapped Pupils Regulations issued by the Ministry in August diabetic pupils are no longer a separate classification in the categories of handicapped pupils. There are relatively few of these children, there being only 12 children on our register of cases. Most of these attend the Children's Hospital for observation and treatment and are quite well adjusted and able to attend ordinary schools. Two children, however, are maintained at residential special schools for diabetic children as follows :—

	Boys	*Girls*	*Total*
St. George's Hostel, Manchester . .	1	–	1
St. Monica's Hostel, Deal	–	1	1

During the year 2 children were sent for a fortnight to holiday camps for diabetic children under arrangements made by the Diabetic Association with the approval of the Ministry of Education.

Epileptic Children

Although the number of epileptic children ascertained is not large there is a slight increase in the number of children placed in residential schools. Each epileptic child tends to be a problem in himself, and if the picture is complicated by backwardness the problem of proper placement becomes more acute. In the case of parental objection to placement in a residential special school the only course is to proceed by way of obtaining a school attendance order, and this usually means that the child has to be so socially an outcast that the whole neighbourhood rejects him, with the result of an added maladjustment to the child's make-up. At the end of the year one such child was the subject of a complicated case of the failure of the parent to allow the child to attend a residential special school. At the end of the year 7 children were being maintained in residential schools for epileptic children as follows :—

	Boys	*Girls*	*Total*
Chalfont Epileptic Special Schools, Bucks ..	1	1	2
Lingfield Epileptic Special Schools, Surrey ..	2	3	5

SPASTIC CHILDREN

Cerebral Palsy Assessment Clinic

Grace Woods.

As was explained in the Report for 1952 this Clinic is held at the Bristol Children's Hospital under the general direction of Professor A. V. Neale, and Dr. A. L. Smallwood, with a team consisting of a medical officer of the L.E.A., a medical officer nominated by the professorial unit, and an educational psychologist on the Local Authority's staff. During the year 1953 this Clinic has continued to be held weekly and by the end of the year 235 children from the clinical area had been seen by the cerebral palsy assessment team. It seems likely that all the " spastic " children of school age in the Bristol area have now been seen, except for those in residential institutions. To obtain a complete picture of the condition it is hoped to see these children in 1954.

It has become increasingly evident that in examining cerebral palsied children we are dealing with a wide variety of medical conditions and an accurate diagnosis of each case is important. After a complete examination of the children, consultant opinion is obtained when necessary about the various manifestations of cerebral damage such as auditory, visual, and muscular defects, and these findings are assessed in conjunction with the child's intelligence level, learning difficulties and any epileptiform manifestations. Some of the children have been admitted to hospital for fuller examination when the diagnosis is uncertain.

Undoubtedly the disability in a fair number of these children dates from an abnormality in the birth process, and the consequent brain damage may be widespread. In deciding the most suitable school for this type of child consideration must be given to all the child's physical defects, and particularly to the child's functional ability in walking and feeding himself. In many cases education at a special school is the only solution. In other children the brain injury has been minimal and it is only necessary to recognise the child's handicap, make allowances for it, and the child can fit into a normal school. During the year a considerable number of hemiplegic children, i.e. children with a paralysis of one side of the body only, have been seen, and all have fitted into normal school. In fact a few have gained places at grammar schools.

Among other causes, it has been instructive to find some cases where there is a family history of the condition, and any abnormality in the birth process may appear to be coincidental. In these children there may be no learning difficulties and only their physical handicaps call for special school placement. The importance of diagnosis in these cases cannot be overstressed as the physical condition may be slowly progressive and any treatment, particularly surgical, must be applied with caution in view of the probable outcome of the disease.

Another interesting small group of cases is that of so called " spastic " children in which the condition is more truly a spinal palsy, due to an abnormality in the spinal cord or vertebral column. These children show none of the learning difficulties of cerebral palsied children and are fit for education with normal children of the same intelligence level. They need no special care, except for the condition of the legs.

Some of the cases referred to the team are severely mentally handicapped children without physical disabilities who can hardly fit into the category of cerebral palsy. On the other hand a few children seen show a slight motor inco-ordination which may not be outside the normal range. It may be difficult to decide whether a clumsy child who is backward in walking has suffered any cerebral damage. A few cases seen have been of exceptional medical interest, and they have all helped to confirm the statement that in treating cerebral palsied children we are not dealing with a single disease entity. Each case needs separate investigation before treatment is commenced and educational arrangements made.

Claremont School for Spastic Children

Margaret Ram.

This year we have kept our original fifteen children and admitted a sixteenth ; we now have eleven girls and five boys. Only four of these are still under five years old, but though most of them spend at least part of the morning in the class-room we continue to keep mainly to our nursery routine.

Our physiotherapist, Miss S. M. Hack spends most of her day in giving individual treatments, but she also integrates her work wherever possible with the normal life of the children. She helps with feeding, washing and dressing, and is experimenting with group activities on the lines of the wireless Music and Movement programme. Even the more seriously handicapped children join in these ; if they can crawl, or only roll, they make an attempt to get around under their own steam.

To encourage movement and free play we have acquired new outdoor equipment, a sandpit, a swing and a large rubber dinghy which can be filled with water for a paddling pool. We also have individual gardens, most of which were energetically cultivated.

The mothers of these children continue to help us in various ways. Some spend a day each week at the school, another comes each day at lunch time and remains for the afternoon, while those with more home ties take it in turn to provide escorts in the cars. The fathers and other friends have made us many toys and items of equipment.

The following notes on the children at Claremont School for Spastic Children have been made by Dr. Grace Woods.

Age on 31/12/53.		
W.A.	5.11.	Spasticity of legs due to a spinal cord defect. Normal intelligence with no learning difficulties. He was not steady enough in walking for normal school at 5 years of age, but he is walking better and will go to a Primary School shortly.

G.B.	4.6.	Severe spasticity of all limbs with normal intelligence and speech. He has a good vocabulary. He is making slight physical progress, will cooperate and is beginning to use his arms for purposeful movements.
I.B.	6.2.	Spastic quadriplegia. Subnormal intelligence. His progress has been slow. He appears to appreciate his environment and can understand signs but not speech.
T.C.	5.4.	Athetoid child who could walk on admission. He is becoming steadier in his movements, and has been seen riding a tricycle without using his hands. He has just started to feed himself. He is very anxious to learn and has just commenced to learn reading.
S.C.	6.11.	Unusual dreamy child with unsteady gait. Lives in a world of fantasy. She is commencing to read, but has little number sense. She is very musical.
M.G.	4.6.	Spasticity of legs and normal intelligence. Did not walk until 3½ years of age. Walking is steadily improving and she should be fit for ordinary school at 5 years.
D.H.	6.0.	Severe athetoid with some overlay of spasticity. Intelligence appears normal. On admission to school he was helpless. Can now kneel, stand and hold himself momentarily on all fours. Speech very defective. Can read a few words and knows figures up to 10.
K.H.	6.3.	Spasticity of all four limbs. Dull normal intelligence. Typical scissor legs and equinus of feet on admission. Can now crawl a short time on all fours, and can stand holding on to furniture and sit on a stool. Her left arm hardly reveals spasticity now. Severe perceptual difficulties but now knows letters and figures and can learn by heart easily.
G.H.	7.0.	Severe athetoid. Normal intelligence. Helpless on admission. Can now crawl on all fours, kneels, stands and just able to stand alone. Starting to feed herself. Speech is defective, but is improving in pace with her general physical improvement. She can read and do simple number and money sums.
P.H.	5.4.	Right hemiplegia. Dull normal intelligence. Has only recently been admitted to the school. She is slow in learning, but perseveres in using her defective hand.
M.L.	7.11.	Severe athetoid with tension. She was helpless with no control of arms or legs on admission. Can now crawl anywhere by her own individual method, and can kneel and stand. Speech is intelligible to those that know her. She can read and spell and knows a few of her tables.
M.Lw.	6.10.	Hydrocephalus with " plastic rigidity " of legs. Could sit on admission. She now crawls anywhere and can walk 10 feet in parallel bars. Can read Beacon Reader 3 and write letters and figures.
E.M.	7.7.	Spastic triplegia. Improvement has been so marked that spasticity can barely be detected now except in one leg. She has severe perceptual difficulties. She can now read well but has little number sense. Will be fit for normal school soon.

L.S.	4.6.	Hydrocephalus with tremor and general plasticity. Normal intelligence. She was unable to roll over or crawl on admission. She can now crawl and walk holding on to furniture and can pull herself to stand easily.
J.S.	8.7.	Athetoid of normal intelligence. Just beginning to walk independently and to feed herself. Can read and do mental arithmetic and money sums. Can write simple sentences on typewriter.
D.T.	4.0.	Spastic quadriplegia who was helpless on admission. Normal intelligence. Can now roll over and get wherever she wants to. Can kneel prone on all fours and is just beginning to crawl.

HEART DISEASE AND RHEUMATISM

Cardio-Rheumatic Clinic

C. Bruce Perry.

The organisation and work of the Cardio-Rheumatic Clinic has continued as in previous years. The number of new cases referred to the Clinic has somewhat diminished when compared with last year, as has also the total number of children examined and re-examined. This is almost certainly a reflection of the diminishing incidence of acute rheumatism that has been noted and mentioned in previous reports. The actual figures for new cases of rheumatic heart disease, as given in the attached summary is, however, misleading, as many of the attacks of acute rheumatism last year were relapses and occurred in children already attending the Clinic. Since the disease is now notifiable in Bristol we have the figures for actual attacks of acute rheumatism, and the figures given in the summary should therefore be read in conjunction with the notification figures for the year. Including the cases listed as new cases in the summary there were 37 children who suffered an attack or relapse of chorea, acute rheumatism or rheumatic heart disease in 1953. This is, of course, a very small number compared with the state of affairs twenty or even ten years ago. Furthermore it is gratifying that of these 37 cases no evidence of involvement of the heart was found in 17.

Research into the prevention of acute rheumatism has continued, mainly along the lines of an attempt to prevent the precipitating streptococcal infection, but this is incomplete and no papers have yet been published.

Summary of cases attending CARDIO-RHEUMATIC CLINIC, 1953, including Primary, Secondary, Grammar and Nursery Schools

	No treatment or restriction	No treatment but restriction of games, etc.	Treatment and school	Treatment and exclude from school	Institutional treatment	TOTAL
NEW CASES						
Rheumatic Heart Disease	1	—	—	—	9	10
Chorea	—	—	1	—	4	5
No Organic Disease ..	35	—	—	1	—	36
Congenital Heart Disease	4	1	—	—	—	5
Various	2	—	—	—	14	16
	42	1	1	1	27	72
RE-EXAMINATIONS						
Rheumatic Heart Disease	270	16	2	2	8	298
Chorea	16	—	—	—	2	18
No Organic Disease ..	373	—	—	—	—	373
Congenital Heart Disease	83	17	—	1	3	104
Various	60	—	2	—	1	63
	802	33	4	3	14	856

No. of Individual children examined	510
No. of New cases for 1953	72
No. of Re-examinations	856
TOTAL NUMBER OF ATTENDANCES	928

HOSPITAL SCHOOLS

At the end of the year the following children, who were patients in hospitals, were being given education under the recognised hospital school arrangements.

	Boys	*Girls*	*Total*
Winford Hospital School, Somerset (*Voluntary Management*)	21	16	37
Frenchay Hospital School, Bristol (*Bristol Maintained*)	41	18	59

HEALTH EDUCATION

D. M. Evans.

As part of the Coronation celebrations in schools in the Southmead area it was proposed by the Chief Inspector of Schools (Mr. T. E. Eveson, M.A.) that a week should be set aside for the display of activities centred round the health and well-being of school children in the Southmead area of the city. One day was allotted to the school health and public health services, the remainder of the week being devoted to other school activities. Nine schools in all, which served the area, took part in these arrangements. These schools comprised infants, junior and secondary modern schools, and the day school for deaf children ; arrangements were made for these schools to be opened to visitors on various days during the week. Discussions were held with the Heads of the schools taking part, under the Chairmanship of Mr. Penry Williams, the Head of Greenway Secondary Modern School, and finally a programme was arranged in which the Monday was devoted to school and public health activities. An exhibition showing various aspects of school and public health work was held at Greenway Secondary Modern School under the heading of " A Healthy Child is a Happy Child ". An evening programme designed mainly for the parents of the children at the Southmead schools was arranged at Greenway School on Monday evening. The programme was as follows :—

1. Exhibition.

   Including Models and Paintings ; Historical Items ; A Road Safety Exhibit (Bristol Police), etc.

2. Films.

   Illustrating Health Principles and introduced by a Health Department speaker.

3. Brains Trust.

   Subject : " The Health and Well-being of Southmead Children."

   Chairman—Rev. Derek Tasker, B.A., Vicar of St. Stephen's Church, Southmead.

   Panel :—

1.	Dr. C. B. Grimaldi	Family Doctor.
2.	Mr. H. E. Lewington, B.Sc.	Children's Officer.
3.	Miss E. J. Adams	Head, Doncaster Road Infants' School.
4.	Mr. C. J. Beedell, B.Sc.	Educational Psychologist.
5.	Mr. R. Bennett	" Uncle Bob ", *Bristol Evening Post.*

Arrangements were also made for the children in the various schools in the area to visit the exhibition during the day, and a sanitary inspector and a health visitor were in attendance to talk to the boys and girls. In this way several hundreds of children received talks on the health subjects displayed in the exhibition, including care of eyes, teeth and ears, care of feet, atmospheric pollution, clean food, and prevention of accidents. In addition, the exhibition included much information on historical and current health services. The Road Safety Section of the City Police collaborated and provided an exhibit with Sgt. Viney of that section to provide the necessary explanations and advice. Many of the exhibits used, such as diagrams and panels illustrating the school health services of the Public Health Department were originally produced for the Festival of Britain Exhibition in Bristol. The exhibition attracted a rather disappointing attendance from the parents, although it was, of course, seen by some hundreds of boys and girls. It was felt afterwards that it would have been better to have held the exhibition on the last day of the week, when the interest of the parents would have been greatest. The evening arrangements included the showing of two films introduced by a health visitor, and a brains trust which was attended by about one hundred people, some of whom were involved in the organisation of the arrangements. It can scarcely be argued that the response of the parents to the efforts of the Health and Education Departments to provide information and advice on an authoritative plane on the health and well-being of their children justified the time and expenditure involved. The questions asked of the distinguished panel who had volunteered to take part in the brains trust were sensible and searching but should have reached a wider audience who could have profited from their answers, as well as from the films and exhibition. Two things seem to have militated against greater success. First, that the size of the exhibition warranted it being held at the end of the week with the interest of the week's proceedings and added popularity of the open days at the school to stimulate attendance. The second was that the school chosen for the exhibition was excellent from the point of view of facilities and co-operation of the staff, but for one reason or another it had not yet formed a Parent /Teacher Association which would have provided a ready made nucleus of support.

However, these criticisms having been made, the venture was an experiment well worth making with lessons for the future, and the parents who did attend were most appreciative of the efforts made, as were the children.

INFECTIOUS DISEASES

A.L.S.

This has been a measles year, the number of cases occurring amongst school children being 3,221 as compared with 805 in 1952. As I mentioned in my report for 1952 there is something of a tendency for the onset of measles to be delayed until the child reached school age. This is borne out by the following figures which show the percentage of school children who contracted measles to the number of children of all ages who contracted the disease.

	School Age	*Under School Age*
1953	**3,221** (**43·2%**)	**4,239** (**56·8%**)
1952	805 (38·9%)	1,261 (69·1%)
1951	2,484 (35·22%)	4,568 (64·77%)
1950	1,264 (44·6%)	1,570 (55·4%)
1949	1,315 (36·0%)	2,337 (64·0%)
1948	2,111 (37·41%)	3,531 (62·59%)

The same process seems to apply to children with whooping cough as the following figures will show.

	School Age	*Under School Age*
1953	**691** (**34·78%**)	**1,296** (**65·21%**)
1952	475 (26·5%)	1,317 (73·5%)
1951	510 (27·1%)	1,372 (72·9%)
1950	982 (32·16%)	2,071 (67·84%)
1949	106 (29·04%)	259 (70·94%)
1948	434 (24·07%)	1,369 (75·9%)

There were more cases of poliomyelitis in 1953, 36 cases occurring as against 10 in 1952. 20 of these were boys and 16 girls, 29 being of the paralytic type and 7 non-paralytic. The ages of the children ranged between 4 and 11 years. The cases were spread over an unusually long period, some occurring right up to the end of the year. This may have some association with the unusually mild weather which was experienced in the last quarter of the year. Fortunately the cases generally were not severe and no deaths occurred amongst school children.

There were 5 cases of cerebro spinal fever during the year.

In pursuit of the policy outlined in my report of last year on the relaxation of quarantine restrictions for contacts of infectious diseases fresh advice was issued to the doctors, nurses and heads of schools about the policy to be followed. As from the commencement of the summer term, 1953, no exclusions from school have been made of contacts of cases of whooping cough, chicken pox and measles. Up to the end of the year this minor administrative change had not resulted in any uneasiness on the part of the general public and no harmful effects seem to have accrued.

During the year 442 patients of school age were admitted to the Infectious Disease Hospital at Ham Green, the average stay per patient being 22·1 days.

Immunisation against Diphtheria

Immunisation against diphtheria was continued during the year in the schools and clinics on the same lines as in previous years. Visits are paid to all the infants schools, and regular sessions for immunisation are held at the Authority's clinics. It is estimated that 77% of the school population is now protected against this disease, and there has been no case of diphtheria amongst Bristol school children in the last four years. The figures of immunising injections given during the year are as follows :—

Number given full course of immunising injections ..	1,141
Number given " booster " injections	4,603

Immunisation against Whooping-Cough

A scheme for the immunisation of young children against whooping-cough was commenced early in November, 1953. It is recommended that children under the age of one should start a course of injections against whooping-cough after the small-pox vaccination but before the commencement of diphtheria immunisation. The first injection should be given not less than one month after successful vaccination, and the second and third injections at subsequent monthly intervals. A further booster dose is recommended just before the child starts school if he or she has not had whooping-cough. Children should therefore have a valuable degree of protection at the commencement of school life. It is not intended to re-inforce the immunity by a campaign through the schools.

Epidemic of Vomiting

A. L. S.

During the autumn my attention was drawn to an outbreak of sickness which was occurring in a grammar school for girls. The first notice was taken of the condition in the week commencing 19th October, but it is probable that a few cases occurred before this date. Between this time and the end of the term about 90 cases occurred in the school out of a population of 460. The condition seemed to be confined to the younger members of the school. The maximum incidence was 23 cases out of 30 in one form, but generally speaking the incidence was between 5 and 8 out of classes averaging 30. There was no explosive outbreak and only a small number of girls was affected at any one time. The symptoms were usually dramatic. From a normal appearance a girl would suddenly become " grey green " and would vomit before she had time to get to the cloakroom. Often vomiting would be repeated once or twice and frequently headache was experienced. The girl felt unwell at the most for two days, the majority staying at home for one day. About one-third of the girls had a coincidental throat infection, which was recognised as such by the girls. With an illness like this which did not cause the child to be presented to her own G.P. epidemiological investigation became very difficult. Very often girls had difficulty in remembering when the sickness had occurred when enquiry was subsequently made, and it may be that a number of cases was missed. On the other hand coincident infections might have been responsible for similar symptoms, and there is always a possibility of mild hysterical symptoms being observed in girls of this age group. Diligent enquiry failed to elicit any condition in the staff which might have been similar, with the exception of one member who had a mild intestinal upset with diarrhoea. So far as can be found by enquiry of the girls no other member of their families was affected. When this matter came to notice it was realised that these girls came from all over the city and some enquiry was therefore made in a sample of schools to find out if the infection was widespread. No evidence at all was found of any similar infection in children below the age of eleven. In the maintained grammar schools there was no evidence of an undue amount of sickness for the time of the year. It was of interest at this time that some of the schools told how they always had a few children being sick for various reasons. However, it came to my knowledge that three non-maintained schools had had experience of this condition. Through the courtesy of the medical officer and matron I am able to say that two girls' schools had about 30 cases each in the early part of the autumn. These two schools have a number of boarders in whom the condition is more readily observable. In some of the cases at the schools nausea without sickness was the most prominent feature and at least one member of the staff was affected in this way. The third non-maintained school had an experience of epidemic vomiting in June. A personal experience of one of these cases is that the eldest boy of the family, aged 11, came home, vomited in the night, and after a day of minor malaise was perfectly well. A brother was similarly affected two days later. Two adults had acute nausea and mild diarrhoea. In view of the lack of evidence of infection of children under eleven, it may be of interest that in this family two children of four and two years were unaffected. On enquiry at the first boy's school it appeared that 9 out of 30 in his form had a similar infection. Since that date enquiry from many agencies about the town has shown that the condition is very widespread indeed. To most people it seems to be an effect of mild food poisoning ; in local parlance " something we ate ". It is not a condition which usually causes the affected person to seek advice from the general practitioner and few G.P.s are aware of the true incidence of this infection. So far as is known, it appears to be a virus infection, and of course an interesting speculation is of the relation this virus bears to the virus of poliomyelitis. There is no evidence in this mild outbreak at schools to relate the two conditions. However, it is of interest that poliomyelitis in Bristol this year had dragged on to an unusually late time in the year and at the end of the year cases were still being reported.

Athlete's Foot

A. L. S.

For the last two years a secondary modern boys' school has had a visitation of this tiresome condition in the summer term. It was originally reported by the teacher from the school who had charge of the boys at the baths, and on investigation some 60 boys were found to be affected to a greater or less extent. It is possible that other schools, particularly secondary modern schools, were similarly affected, but attention had not been drawn to the amount of infection because of the absence of " ad hoc " surveys. Certainly it is common knowledge amongst dermatologists that many children are affected by the epidermophyton, and that the condition is remarkably resistant to treatment. Foot surveys were carried out in the junior and infants' schools of the district with negligible results. Towards the end of the summer term a girls' secondary modern school, remote from the first school, was found to have some cases. The problem which has not been solved is whether the condition is very extensive in the secondary schools and its presence is accepted by the sufferers as normal, or whether it is merely the increased vigilance of the teachers in detecting the condition that results in the cases being brought forward for medical attention. The action taken with the two schools was for the school nurse to inspect all the children and for a high standard of hygiene of the feet to be insisted upon, and for individual treatment to be given at the school by the nurse. An absolute ban throughout the school was placed on attendance at the swimming bath, and a ban on those children affected taking part in any sports or games. My own view is that the swimming baths are not the principal or even a prominent factor in disseminating the epidermophyton, and that shared footwear in spite of the schools' rules, is probably a frequent cause. (Gym shoes are fumigated before being issued to a fresh user.) The condition is endemic amongst teenage children, and only a high standard of personal hygiene can help to keep it in check. We believe that this particular school has by no means ideal changing arrangements which are cramped and dark and has inadequate storage accommodation by modern standards, and these may well be factors in the persistence of the condition at this school.

The teachers have been assiduous in their efforts to achieve this high standard which is so obviously for the benefit of the school and the children. Probably what is needed is a prophylactic dusting powder which the children themselves could apply, either at school or in their homes, during epidemic times.

Medical Examinations of Entrants to the Teaching Profession

In accordance with the arrangements outlined in Ministry of Education Circular 249, the medical examinations of candidates applying for entry to training colleges and entrants to the teaching profession, were carried out by the Medical Officers of the Local Authority. During the year, 222 candidates resident in Bristol were examined in connection with admission to training colleges and also 44 entrants to the teaching profession were examined for some exceptional reason.

MEDICAL INSPECTION

A. L. S.

A complete medical inspection was made during the year of 15,072 children attending the Committee's primary and secondary schools. The tables relating to these examinations will be found in the statistical section at the end of this Report.

Co-operation of Parents

The number of parents present at primary and secondary school medical inspections was as follows :—

	No. Examined	*Parents Present*	*Per cent.*
Entrants	6,022	5,276	87·61
Second Age Group	3,553	2,588	72·81
Third Age Group	4,234	1,097	25·90
Total	13,809	8,961	64·97

MILK AND MEALS IN SCHOOL

T. B. Hetherington.

Organisation

From a return taken in October, 1953, 2,449 children were receiving free dinners, 145 on part payment and 16,105 at the normal charge for dinners (9d. per dinner in primary and secondary schools, 8d. in nursery schools and classes and 6d. in day special schools). The charge for dinners was raised by the Ministry of Education from 7d. to 9d. per dinner from 1st March, 1953. Sixty-five kitchens were supplying meals at this time to 196 canteens.

The same return shows that 51,860 children were taking milk (one-third pint daily in primary, secondary and special schools, two-thirds pint daily in nursery, South Bristol Open Air and the Spastic Schools), a percentage of 88·30 of the total attendance. The percentage of children taking dinners was then 31·84 compared with 37·46 in October, 1952, the drop in numbers being caused mainly by the increased charge.

The income scale for the award of free dinners was revised in February, 1953.

No dinners were supplied during school holidays.

Meetings of kitchen and canteen staff were held to show the correct use of detergents and to emphasize the importance of care in the washing up and sterilisation of equipment.

Soda is no longer supplied as the majority of tins and small equipment are now aluminium and apart from discolouration a good deal of " pitting" of surfaces was noticeable. All other cleaning materials and equipment are being chosen with special regard to the effect on equipment surfaces.

The relaxation of food restrictions means that a close check must be retained on the useage of all foods in order that the correct proportions are maintained. A reduction of actual plate waste has been noted over this period.

A special effort is being made in all kitchens to cook all meat on the day it is served. Hitherto, roast meat has been pre-cooked. However, where the meals are cooked and served on the premises all meat is now being cooked on the day it is consumed and it is hoped in the future that arrangements will be made in central kitchens for the same practice to be followed.

Consumption of Milk in Schools—An Experiment

A. L. S.

In the Report for 1952 mention was made of the fact that girls in secondary schools appeared to be taking less milk than the boys and that a decline had been observed in the percentage of girls in secondary schools who were taking milk. This matter was discussed with the Heads of the secondary girls' schools, and efforts have been made to improve the percentage in the schools where it had been unduly low. At one secondary modern girls' school an interesting experiment was introduced by the Head in an effort to make the drinks more attractive and to increase the consumption of milk. A scheme was introduced at the end of April by which hot milk drinks were made available in addition to the cold milk. During May experiments were made to find the most popular drink. The cold milk was flavoured with different fruit extracts, such as raspberry, banana, strawberry and pineapple, but the most popular drink was undoubtedly the hot milk prepared with Cadbury's Hot Drinking Chocolate and sugar. The preparation of the drinks and clearing up was undertaken by the fourth year girls, two taking duty for a week at a time, and groups of girls throughout the school volunteered to help in the washing of the beakers during the lunch hour. The charge for the hot drink was fixed at ½d., which covered the cost of the drinking chocolate and sugar and provided a small sum with which to buy replacements of beakers, etc. The hot drink has been served in the school from two tables, and cold milk was served from a third table. In this way over 90% of the girls have had a milk drink served to them during the mid-morning break, and they have appreciated being able to take this refreshment in an adult way, in groups, chatting sociably and coming and going. as they wished. At the same time one of the prefects made herself responsible for purchasing biscuits for sale with the drink. This prefect kept a most careful record and has conducted the business side of the matter very successfully. Since leaving school she has become a cashier at one of the big city stores.

Milk in Schools

F. J. Redstone.

Close attention was again paid to the quality and general standard of milk supplied to Bristol school children.

During the year, 232 samples of pasteurised milk were submitted for examination bv the phosphatase and methylene blue reduction test. Of these samples, three failed the phosphatase test and twelve failed the methylene blue test.

In each case investigation was made into the reason for unsatisfactory samples and adjustments and improvements corrected the position as proved by follow-up samples.

In recent years many complaints have been made by Dairy Companies regarding the unsatisfactory condition of milk bottles returned from schools. This matter was discussed fully with the Education Department who drew attention to the need for improvement and since that time no complaints have been received. However, this aspect of school milk supplies is important and continued vigilance is necessary to prevent deterioration in the arrangements.

School Kitchens

F. J. Redstone.

Inspection is made of all foods supplied in conjunction with the school meals service and during the routine sampling procedure carried out by the department, some 262 samples of various types of food were collected and submitted for analysis from the following school kitchens :

South Street, Phoenix Grove, Begbrook, Fairfield and Filton Avenue.

All food samples were reported as satisfactory except some oatmeal and peas, which were mite-infested and a small quantity of dried milk powder found to be of poor quality. These foods were condemned as unfit for human consumption.

The meat supplies to school kitchens were regularly inspected and reported as satisfactory.

An outbreak of food poisoning at Rose Green High School in July was probably due to an infection in ham cooked at the school. One of the school helpers had been ill with a " heavy " cold and staph. aureus were discovered in the ham. It was assumed that the ham could have been infected by this food handler. This matter was investigated in collaboration with the School Health Service, which has done a great deal to establish a satisfactory code of food hygiene. The observance of clean methods is most important in connection with communal feeding centres. It is pleasing to report that close collaboration continues to exist between the Health and Education Departments and on several occasions, discussions were held on improved methods and the replacement of equipment.

MINOR AILMENTS

A. L. S.

The system of treatment of children at clinics and other places for minor ailments is a long-standing and cherished function of the Local Authority's medical arrangements. Originally the need was for children whose parents could not afford to pay for the services of a general practitioner when their child was requiring medical care. Nowadays since 1948 each child has had a legal right to claim the attention of a doctor for any ailment, and it might seem, therefore, that the duty of the Local Authority has lost something of its former importance. However, there are many reasons why the system should continue, and it still remains a legal responsibility of the Local Education Authority to provide facilities for the treatment of minor ailments. The number of children presented as in need of treatment in 1953 is the lowest since the war years, when evacuation interfered with the service. It is tempting to believe that the fall in the demand for the service is due to a decline in the virulence of the organisms responsible for skin disease, and there are some grounds for believing that this is so. Cases of impetigo seen during the year showed a slight increase over the number seen in the last three years or so, but still remains substantially below the cases seen during or immediately after the war. Certainly one never sees the marked cases of skin sepsis which used to be such a common sight in certain of our schools. It is tempting to believe that the children are healthier and more able to resist minor ailments, such as abnormal skin conditions, etc., and this may well be effective in the reduction of the demands on the services. How far children are being taken to their own doctors, who previously used to attend the clinic, is not known with any certainty but it is not thought to be very great.

The matter of parental responsibility in caring for children, who are subject to these minor medical conditions, is a cause of concern to most social workers to-day. The general public has had so much advice offered to it in the past about the conduct of its medico-social affairs that it now hesitates to take active steps of its own when some advice from authority is not given. How to get the public to accept more responsibility for itself has been a problem in one particular district of the city ; a pre-war housing estate where the children present themselves to the Head of the school for the most trivial conditions expecting to be sent to the clinic. At the instance of the Heads of the five departments on the one school site a clinic was set up on the premises to deal with the school population of about 2,500 children. This enjoyed unbounded success, if success can be counted by the number of patients seeking treatment for their often very minor disorders. The two sessions per week previously given by the doctor at the school were transferred to the William Budd Health Centre when this opened in September, 1952. A new policy was formulated, with the collaboration of the Sister-in-Charge at the William Budd Health Centre, that all children whose general practitioners worked at the Centre were to be seen by these practitioners, and as far as possible the parents of any children attending as emergencies were to be encouraged to carry on subsequent treatment within the limits of their own capabilities. It was possible to deal with only a minority of the children for treatment in this way. It is hoped that the stiffening of attitude on the part of the doctors and nurses in the area may encourage more parents to have belief in their own capacity to deal with minor ailments. A special feature of these arrangements is the possibility of close relationship in treatment at the Centre between the six firms of general practitioners and the one school medical officer, who attends on two afternoons per week. Increasingly he is being consulted by the general practitioners on matters which concern the health of the school children, and this very valuable relationship can only lead to a better understanding of the problems of the school child and the better ways of dealing with them.

The reduction of over 10% in attendances at the minor ailment clinics is fairly general throughout the city. Certain districts have had an increase in population because of housing extensions, and do not show the same decline in the demand on the services. Other and older areas tend to show a correspondingly greater decline. There are eight clinics where a doctor has two or more inspection sessions per week, giving the whole afternoon, and four other clinics where treatment only is done and cases are referred for supervision by the doctor to the nearest main clinic, with the exception of one clinic which is held in the open air school where the doctor has a regular two sessions per week. In addition the health visitor /school nurse attends to give minor ailment treatment at four special schools.

One of the difficulties which is experienced in the service is that of parents who seek advice from the school medical officer for children who are already in attendance at their own general practitioner. Where the parents allow it to be known that they have already received advice or treatment in this way, the school medical officer refers the patient back to the general practitioner, but in some cases it is not possible to find out if the parents are using the school medical officer for a second opinion. In consequence there have been times when friction has arisen between the two medical authorities. However, with the increased liaison with the general practitioners, which is now so much a part of the work of the school health service, difficulties like this have mostly been overcome. The general practitioners have, we believe, become more tolerant of the service, and in many cases have actually sought to use the service of the treatment centres for their patients. It is doubtful if the general practitioner services could absorb all the work which is done at the Authority's centre. On the other hand a familiar criticism is that the service " spoon feeds " the parents in a way that the general practitioner could not do. One way in which children receive priority in the service is that they are able to attend in school time, sometimes with their parents, but often with older children. One very tangible advantage is that the parents are not charged for a prescription for any medicaments which they receive at the clinic and which they would have to pay if they went to their own general practitioners. There is no real knowledge of the effect which this charge has on the work done by the minor ailment services. If anything, of course, it should result in more children being dealt with by the school services. Yet in spite of this factor the number of children treated has diminished.

Future development of the minor ailment services is linked with other aspects of the health service, and in general it seems desirable that every school child should have access to a treatment centre within a reasonable distance of his school and home. In the future then it is likely that there will be more clinics but smaller in character, and likely to deal with a more selected population. The possibility of clinics held jointly with the Infant Welfare Department has not been overlooked, and it seems possible that this arrangement would offer a solution for the new areas of the city which at present have not sufficient population to make it worth while to start a separate school clinic. In this connection it must be mentioned that all except two of the fulltime nursing staff are health visitors, but that much use is made of part-time nurses in school clinics, who are not health visitors.

The figures of attendances and numbers of cases of impetigo and scabies for the past nine years are given below.

Minor Ailment Clinics Attendances

	School Population	*First Quarter*	*Second Quarter*	*Third Quarter*	*Fourth Quarter*	*TOTAL*
1945 ..	46,500	42,161	42,289	34,155	46,892	165,497
1946 ..	47,886	41,400	42,845	37,269	50,044	171,558
1947 ..	48,870	35,093 (bad weather)	37,483	33,779	48,421	154,776
1948 ..	52,561	48,475	54,852	42,942	45,030	191,299
1949 ..	54,107	50,052	45,383	35,804	50,596	181,835
1950 ..	55,398	50,295	40,387	32,073	40,425	163,178
1951 ..	56,825	34,833 (Influenza epidemic)	47,690	32,814	45,344	160,681
1952 ..	59,855	42,084	46,363	30,825	42,572	161,844
1953 ..	**62,182**	**33,456**	**41,428**	**29,036**	**39,118**	**143,038**

	IMPETIGO No. of School Cases	*SCABIES No. of School Cases*
1940	3,490	485
1941	2,091	2,062
1942	2,413	3,927
1943	1,881	3,197
1944	1,798	2,321
1945	1,416	1,520
1946	1,381	1,312
1947	1,043	789
1948	681	462
1949	544	224
1950	470	211
1951	431	142
1952	488	120
1953	**562**	**82**

Ringworm

R. P. Warin.
A. M. Fraser.

It was reported, last year, that the number of school children in Bristol diagnosed as suffering from ringworm infection of the scalp had shown a steady decrease since the peak year of 1950, when no less than 157 children were found affected by this skin trouble. This decrease was again apparent in 1953, when only 27 new cases in Bristol school children were confirmed at the special Ringworm Clinic held in the General Hospital.

It is noted that there has also been a parallel reduction in children from neighbouring county areas. Of the 27 new cases the fungus was found to be the type derived from human sources in 11 cases and from animal sources in 14 cases. In 2 cases the sources were doubtful.

There has been an interesting change in the epidemiology of the cases during 1953. In the previous three years the patients largely came from a few relatively circumscribed localities and other areas were completely free. These infected localities were gradually cleared up by treatment of the individual cases and checking contacts. In 1953 the cases have been more scattered and only in one or two instances, when the fungus has been shown to be of animal origin, has the source of infection been apparent.

Hairs infected with ringworm fluoresce an emerald green colour when examined under certain wave lengths of ultra violet light. This is provided by the ' Wood's Light ' and is of considerable diagnostic help, particularly in examining the scalps of children who have been in contact with the case at school or at home.

A portable form of ' Wood's Light ' was obtained last year and has proved of considerable value in discovering minimal infection in the contacts. It was also of great value in a recent outbreak of ringworm in a residential institution for children near Bristol. It would have been almost impossible to examine the many contacts at the Out Patients' Department.

The United Bristol Hospitals have recently appointed a full-time mycologist who will be available to identify and study the casual fungi in these cases.

Body Ringworm

During 1953, 309 cases of this disease amongst school children were treated at the clinics. This compares with 194 in 1952.

Infestation A. L. S.

As will be seen from the table given below, the number of individual pupils found to be infested with vermin rose slightly as compared with the previous year, though the increase as reflected in the percentage of school population is not a significant one. It should be borne in mind that the figures include all degrees of infestation, even a small number of nits. Constant endeavours are made by the nursing staff to reduce the amount of infestation, particularly in those schools where the problem is greatest. Legal action is difficult, and the penalty is comparatively small, so that it is rather doubtful in many cases whether a successful prosecution would have a deterrent effect. The problem largely centres round a comparatively small group of constant offenders where the parents are always willing to accept the services of the Authority's clinics for cleansing the children and rarely make any great endeavour to deal with the matter themselves. This fact makes it practically impossible to expect any success with legal action, where parental default has to be proved.

The treatment and cleansing of children found to have varying degrees of verminous conditions or infestation was continued throughout the year, 1,609 individual children being treated and 5,691 attendances being made. Close co-operation has continued between the various agencies concerned in this work, and the valuable help of the teachers in the schools and the staff of the Child Welfare Department is greatly appreciated. The figures for the years 1945 to 1953 with the percentages of school population are given below.

No. of individual pupils found to be infested with vermin.

Year	*No.*	*School population*	%
1945	4,355	46,500	9·4
1946	4,903	47,886	10·2
1947	4,320	48,870	8·8
1948	3,399	52,561	6·5
1949	3,659	54,107	6·7
1950	3,027	55,398	5·5
1951	3,016	56,825	5·3
1952	2,674	59,855	4·5
1953	**2,990**	**62,182**	**4·8**

NURSERY SCHOOLS AND CLASSES

The position as regards accommodation in nursery schools and classes is about the same as last year. There are twelve nursery classes maintained by the Committee with accommodation for 900 children between the ages of 2 and 5 years. In addition there are twelve infants' schools with nursery classes accommodating 420 children between the ages of 3 and 5 years. The pressure on the accommodation continues to be heavy, and the present nursery provision is reserved for difficult or deserving children. At one large nursery school a number of children attend part-time so that some nursery education can be given to as large a number of children as possible. In order to gauge the relative needs of children for admission to nursery schools or classes a points system has been adopted as a guide to the circumstances in each case. In consultation with doctors, health visitors and social workers points are given as follows :—

1 point for physical or emotional defects in the child.
1 point for bad housing conditions and severe traffic conditions.
1 point for separated or divorced parents.
1 point for illness or incapacity of parents.
1 point for large family of young children.

Details of medical inspections in nursery schools and classes during the year are as follows :

	Periodic Exams.	*Re-exams.*
Nursery Schools	579	1,723
Nursery Classes	345	769

Number of Special Inspections and Re-Inspections 240

Classification of Nutrition

	Number of children inspected	" A " Good		" B " Fair		" C " Poor	
		No.	%	No.	%	No.	%
Nursery Schools ..	579	282	48·70	261	45·08	36	6·22
Nursery Classes ..	345	161	46·67	179	51·88	5	1·45

Treatment of Minor Ailments

The following cases of children under school age were treated at the various clinics during the year :

No. of defects treated in clinics and at schools and classes 3,645

Treatment of Defective Vision and Squint

Errors of Refraction (including squint)	15
No. of pupils for whom spectacles were prescribed	6

Dental Inspection and Treatment

No. of pupils inspected by the Dentist—Periodic Inspections	840
—Special Inspections	47
TOTAL	887
No. found to require treatment	458
No. actually treated	242
Attendances for treatment	288
Extractions of temporary teeth	258
Fillings of temporary teeth	21
Administrations of general anaesthetics for extractions	148
Other operations on temporary teeth	202

Medical Treatment of the Pre-School Child

Eye Diseases	57
Ear Diseases	56
Skin Diseases	192
Minor Ailments	59
Aural Surgeon's cases	77
Eye Specialist's cases	86
Heart Specialist's cases	3
Orthopaedic Specialist's cases	144
Chiropody Clinic cases	3
Skin Consultant's cases	37
Enuretic Clinic cases	18
T.B. Contact cases	126
Various	517
	1,375

ORTHOPAEDIC AND POSTURAL DEFECTS

A. L. S.

By arrangement with the Regional Hospital Board, Mr. K. H. Pridie and Mr. D. M. Jones have continued to give one session per week each to orthopaedic work at the Central Health Clinic. This has for some years proved to be an adequate arrangement to deal with children of school and under school age with physical disabilities who are referred by the school medical officers and others. As with other consultant services the consent and opinion of the general practitioner is sought before the children are so referred. Residential treatment for children who are in need of it for physical handicaps is given mainly at Winford Hospital, and there are three other surgeons there. Children in the care of these surgeons have to be seen on discharge from Winford Hospital as out-patients at the Bristol United Hospitals. This represents something of a complication since advice about the physical state and fitness to return to school of these children has to be sought at a place other than the Central Health Clinic. There does not seem to be any easy way of overcoming the difficulty, especially with children who have had poliomyelitis and have been seen first at the Children's Hospital. Good co-operation between the general hospitals, the special hospital and the clinics has existed for many years, but occasionally a child does slip through the net of vigilance. It is rather disconcerting not to be aware of children who develop a handicap, such as poliomyelitis, in time for proper provision to be made for them to start their school life at the proper place.

There is a small increase in cases of Tb bones and joints compared with the previous year, but this cause of disability still remains at a very low level. The number of cases of flaccid paralysis in children under five (25 in 1952) has been reduced to 4 in 1953, largely as a result of the advance in age of the children who had paralysis in 1950. This is responsible for the increase in the number of children aged 5 years and over from 47 in 1952 to 56 in 1953. The details of the children seen during the year are as follows :—

	Age five years and over	*Age under five years*
Paralysis (*a*) Flaccid	56	4
(*b*) Spastic	36	9
Tuberculosis of Bones and Joints ..	7	1
Congenital abnormalities of Bones and Joints	38	10
Amputations	2	–
Rickets	1	5
Genu Valgum	24	40
Various (flat foot, spinal curvature, etc.)	601	78
	765	147

PHYSICAL EDUCATION

J. McA. Milne.
C. E. Cooke.

In the Primary Schools the general standard of footwear and clothing for Physical Education shows decided improvement and this has a direct bearing on the standard of work and quality of movement.

Floors in the halls of old schools have been much improved of late, and more children are able to work safely with bare feet ; where this is possible, better footwork and more ease of movement are achieved.

No satisfactory solution has yet been found whereby new school hall floors are both pleasant to look at and safe to work on. The slippery surface inhibits free movement, and hinders the nervous child in gaining confidence.

Two Courses for teachers in Primary Schools have been held, both were well attended and the teachers showed great interest. Many visitors from overseas as well as lecturers, teachers and students from this country have visited Primary Schools to see modern methods in Physical Education. The Inspector of Physical Education from Norway and one of his instructors from a Teachers' Training College were among those whose visits will be remembered by teachers and children alike. The work in Norway seems to be much in accordance with our own, and the obvious interest shown, and the help they gave made their visit a special pleasure. The connection of one of them with members of the Kontiki Expedition proved of great interest to the children in one school, who had made a model of the Kontiki raft, and an invitation to see the original was given to any child who might be visiting Norway.

Several Primary Schools in the city have been invited to Schools with more open surroundings during an afternoon in the Summer term. During this afternoon each school has shown its own type of Physical Education, and both schools have joined together in games, singing or dancing. This has been a great occasion for the schools with less fortunate surroundings and of social importance to both.

Physical Education in the secondary girls' schools is suffering at present from a lack of suitably qualified teachers.

During the year there have been two Netball Tournaments, in which thirty teams took part. We are grateful to the Heads of Badminton and Red Maids' Schools for again allowing us the use of their beautiful grounds for these tournaments. One Hockey Tournament was held at the Imperial Sports Ground, Knowle, in which twelve teams took part.

A Tennis Coaching Course taken by a member of the Lawn Tennis Association was held during the Spring term and eight members gained their Tennis Coaching Certificate. Two Netball week-end Courses have been arranged in conjunction with the Bristol and District Netball Association. A National Dance Course was held during the Autumn Term. This was taken by Mr. J. Williams of Bristol University, who taught some dances he collected in Germany during the Summer.

Country Dance parties have again been held at Greenway Secondary School and, in the Summer, one was held at Stoke Lodge playing field.

Three more films in colour on Physical Education were made this year. One taken at Elmfield School for the Deaf shows work under the most ideal conditions, on green lawns and up a great tree. The children show nothing to suggest that they have difficulty in movement ; indeed their skill and enjoyment do great credit to their teacher, and few children in Bristol show more ability in concentration.

The second film shows the pupils of Claremont School for spastic children experimenting with their climbing apparatus, and riding their tricycles ; their enjoyment is obvious and it is greatly hoped that the confidence they gain through climbing will be of physical as well as of mental value.

The third film was made at St. Gabriel's Primary School, and is chiefly for the use of children.

Many Parent-Teacher Meetings, at which the Bristol Film on Physical Education has been shown, have again been arranged. Dr. Smallwood has been present at most of these and answered questions raised by the parents ; it is hoped that many of these answers will ensure a less worrying home life for some of the children and a better appreciation of health problems.

PSYCHOLOGICAL SERVICE

R. V. Saunders.

The educational psychologists may fairly claim to have had their busiest year to date as, in one way or another, there appears to be an increasing demand for their services.

The following table shows how their time was allocated in 1953 :—

Examinations—Child Guidance Clinic Cases	317
Psychological Assessment other than C.G.C. Cases	849
Juvenile Court reports by Psychologist only	120
Treatment/Coaching Interviews by Psychologists	1,051
Parent Interviews by Psychologists	163
School Visits regarding C.G. Clinic Cases	59

Each Psychologist still works with his/her own particular group of schools. Miss Horn, who came to us from Preston in September, took over Mrs. Vant's schools and also her work with the Children's Department.

As the Chief Education Officer has elsewhere reported, it appears as though the provision for Educationally Subnormal children is now more or less adequate in amount, although the physical amenities are not all that could be desired in some cases—particularly at Newfoundland Road Junior E.S.N. School. It is now apparent, however, that the group of children who come into the next lowest intellectual category (i.e., the dull group) require particular attention. Some schools and some districts tend to have relatively much larger numbers of children in this category than others and it is felt that the recognition of this feature might be allowed to find some reflection in staff allocation.

The educational psychologists participated in the L.E.A. course, in March, 1953, for the teachers of backward classes in Secondary Modern Schools. The comparative merits of adjustment groups and special classes for the very dull and E.S.N. children in these schools are often debated. The point which the psychologists are most anxious to stress is that the very dull or E.S.N. child may feel very bewildered and insecure in his first year or two in the Secondary school. On this account, the security of a special class is psychologically more beneficial, at least at the lower end of the secondary modern school.

It has also been noticeable in the cases of certain children who fail in employment, or come into the Juvenile Court after leaving school, that they have been educationally subnormal children who for one reason or another have reached school leaving age without being disclosed to the School Health Service or psychological service as handicapped children. They have in consequence been denied the special help which the L.E.A. is able to give to handicapped school leavers, help which provides a valuable preventive service.

The psychologists' waiting lists continue to be much longer than they could wish, and the present swelling of the school population does not improve matters in this respect. In consequence the psychologists are obliged to give priority to :

(*a*) Schools which they know to have a considerable E.S.N. population.

(*b*) Schools which have urgent psychological problem cases.

(*c*) Schools where they can make the most economical use of their time; and fit in others as best they can.

During the year the psychologists have continued to assist the Hearing Assessment and Cerebral Palsy Assessment Clinics, the Nursery Schools and Nursery Nurses' Training Centre, and Vinney Green Observation Centre (Children's Department). In addition they have lectured to student groups, parent teacher associations and training college groups.

As a service which does its best work in co-operation with many others it is necessary to acknowledge with gratitude the assistance we have had from so many different agencies in 1953.

SPEECH CLINICS

Southern Area

Kathleen Coleman.

Work in the Southern Area of the Speech Clinic has continued steadily throughout the year, and we are indebted to the Heads of schools for their continued interest and co-operation.

The recently developed method of treatment of stammerers mentioned in my report for 1952 has been carried a stage further and has again yielded successful results in every case in which it has been adopted, many of whom have been previously treated without improvement. A modified form of relaxation is being used for younger children, who enjoy it, and although it is only of a few minutes duration the benefit is immediately noticeable.

As we aim to teach the children to manage their stammer rather than attempt to cure it, a check is being kept on all stammerers until they leave school. They are discharged when control appears established and are kept under observation through a follow-up clinic. Daily treatment has been an important feature of the work this year and has proved well worth while.

Claremont School for spastic children is served by this area and a similar method of relaxation adopted for these children has yielded pleasing results and some progress has been made.

A larger number of children of pre-school age have attended this year, which is satisfactory from a preventive point of view. Several children who did not speak have acquired both speech and confidence and some stammers which threatened to be severe have been alleviated.

There have been fewer cases of speech defect this year and they have worked well. One girl of eight, with nasalised speech rectified this after one attendance. This is unusual because it is difficult to persuade children with this disability to use good speech when they have acquired it.

Statistics

	1952	**1953**
No. of cases admitted	85	**73**
No. of cases discharged	56	**110**
No. of cases " resting "	22	**15**
No. of cases in attendance 31st December	79	**27**
No. of cases being " followed up "	–	**27**
Total No. of attendances during year	2,015	**2,904**

No. of cases in attendance 31st December, 1953 = **27**

Stammer	14
Dyslalia	10
Aphasia	3

The following cases may be of interest :—

J.B. aged 5, was handicapped by a stammer so severe, his speech was unintelligible. He attended alternate days for a fortnight to play, by which time his stammer had become negligible. He visits us once each holiday, by his own wish, and this improvement has been maintained.

G.H. aged 6, was recommended from school with a severe stammer. He was shown a simple method of relaxation, which he practised daily at home, and he came to clinic weekly. Improvement was apparent, and enquiry at the school, after three months, brought the reply that they had forgotten he stammered. This improvement has been maintained.

V.C. was only 3 years old and her parents, worried because she did not speak, brought her to see us. Three weeks of play resulted in speech normal for a child of that age.

J.B. aged 3½ years, was extremely shy and showed signs of what would develop into a severe stammer. Three months of play resulted in a confident, happy little boy with no sign of speech difficulty.

Northern Area

Gloria V. Steer.

During the year the work of the Speech Clinic in the Northern Area has continued to extend and to cater for those children requiring treatment both in the immediate area of the Clinic and those on the fringe of the more distant housing estates.

Weekly clinical sessions have been maintained at the Southmead and Portway Health Centres, and a fortnightly session has been introduced by way of an experiment at Russell Town Special School. Here progress has been of necessity somewhat slow, but improvement has been noted in certain cases.

There is a constant demand for Speech Therapy and cases are continually being referred with the result that the work is full of variety and interest. It is not possible to generalize as each case is subject to the influence of a number of differing factors and the progress might best be indicated by illustrations from the case book.

Many cases are suitable for direct speech therapy. Margaret first attended the Clinic when she was six years old. Her speech was dyslalic and there was considerable confusion in the use of consonants in her conversational speech. She used the simple babyish substitutions t for k, d for g, and was unable to make sh, ch and j sounds. An outstanding defect was the omission of ' s ' in combined consonants (e.g. sm, sk). She attempted ' k ' at the first session and was soon able to practise the sound in simple words and phrases. Work on other consonants followed and a marked improvement was noted in her conversational speech. By the time she was ready to work on ' sh ' and ' ch ' she could already make the sounds in isolation and soon began to use them correctly in words, sentences and easy rhymes. At the end of three months Margaret was almost ready for discharge, having worked continuously on speech with hardly any play periods.

With certain children this direct approach has not been possible. Peter's speech at 7½ years of age was more intelligible than Margaret's, but he was similarly using t for k, d for g, tending to omit ' s ' in " double " consonants, and substituting f for th. Mother gave a history of nocturnal enuresis, vomiting and nervous habits when excited or disturbed. The school reported that he was of average intelligence but that progress was considerably retarded. It was soon evident that Peter would not attempt any consonant sounds when asked, so the plan of campaign lay in the use of picture books. He began to imitate the therapist's pronounciation when naming objects and at first, work was centred around ' k ' although no direct attention was drawn to the sound. He made a picture book of his own and a mark was recorded each time he named a picture correctly. Attention was therefore focused on the collection of marks rather than on speech. An improvement in speech was gradually noticeable and after eight months he was ready for fortnightly attendances instead of weekly, and within a short time he was attending once a month for review only. The enuresis and other habits had gradually decreased, and the school reported a marked improvement in every respect. The case was discharged within the year.

The period of treatment varies considerably according to the particular requirements of each case. At 5½ years Ann was retaining a " lisp " in her speech. The correct ' s ' was elicited at the interview and within three weeks the interdental sigmatism had been replaced by the correct sound both in practice sentences and everyday conversation. Billy was a year older than Ann and he had a similar defect. At the end of six months treatment, he still had difficulty with the ' s ' sound and only very slight progress had been made.

David provides an outstanding example of an unsatisfactory patient and an equally unsatisfactory degree of co-operation and understanding on the part of the parents. At 6½ years of age his speech was unintelligible, and very little improvement was made during the next one and a half years. He was lacking in affection for work of any description, and was frequently absent from school. He was indulged at home and excessively over-mothered. Attendance at the Clinic was irregular and mother frequently quoted some trivial ailment as an excuse for non-attendance. A period of daily treatment was attempted as an experiment. Although three or four appointments were not kept during the fortnight, the improvement in his speech was astonishing and very encouraging.

Other experiments with daily treatment for short periods have been made both with cases of speech defect and stammer. During a holiday period a 10 year old stammerer attended the Clinic each day for a fortnight. He grasped the principles of treatment much more quickly than was usual and it was possible to see a daily improvement in his speech. At the end of the fortnight he was able to control the stammer which had not been unduly severe, and he continued to attend each week for a period.

The play-room has continued to be a great source of interest to children of all ages and there have been many instances of the therapeutic value of this type of treatment room.

Details of children attending the clinic are as follows :—

No. of cases in attendance, December, 1952	91
No. of cases admitted during 1953	67
No. of cases discharged	42
No. of cases transferred to Southern Area	2
No. of cases removed from district	2
No. of cases in attendance, December, 1953	112
Total No. of attendances	1,640

TUBERCULOSIS CONTACT CLINIC

Mary Gibson.

The method of examination of children who have been in contact with cases of tuberculosis has remained substantially the same as that adopted towards the end of 1952.

Our aim is to examine all such children within, at most, one month of the notification of the primary case.

Within recent months the X-ray Department has been able to work on Saturday mornings and this has enabled us to cut the necessary visits to the clinic to two, for positive as well as negative reactors to the preliminary tuberculin skin test.

The school medical officers have again recommended many interesting children contacts who, for one reason or another, have escaped the usual channels. It is felt that with their help we already have a fairly complete register of children exposed to the danger of a tuberculosis infection in Bristol. The unstinted help given by the chest physicians during the year has been very much appreciated.

Few children have actually needed sanatorium treatment but those who have, have all been admitted within 1—2 days of their preliminary examination.

The figures relating to children seen during the year are as follows :—

No. of children seen in B.C.G. vacc. sessions	1,107
No. of positive reactors	249
No. of negative reactors who accepted B.C.G. vacc. ..	856
No. of negative reactors who refused B.C.G.	4

Mass Radiography

E. Evelyn Mawson.

The arrangements for the mass radiography of children due to leave school were continued during the year and 3,766 children were X-rayed through the Mass Radiography Service. The details of the cases are given below.

Summary	Boys	Girls	Total
Miniature Films	1,784	1,982	3,766
Recalled for large films . .	50	57	107
Normal large films . .	29	36	65
Did not attend	3	1	4
Significant cases	17	17	34
Under observation . .	1	3	4

Analysis of significant cases.

Of the significant cases, 17 were found on clinical examination to have non-tuberculous conditions as set out below.

	Male	Female	Total
Bony Abnormality	3	2	5
Bronchitis and Emphysema	–	2	2
Bronchiectasis	2	3	5
Congenital Cardiac Condition	2	1	3
Catarrhal right base	1	–	1
Basal Fibrosis	1	–	1
	9	8	17

The remaining cases were found to have varying degrees of tuberculous conditions and were dealt with as follows :—

				Disposal			
	Boys	Girls	Total	No Action	Dr.	Disp.	San.
Active							
Active Primary Lesions . .	–	–	–	–	–	–	–
Post-primary unilateral . .	–	1	1	–	–	–	1
Post-primary bilateral . .	1	1	2	–	–	–	2
Tuberculous pleural effusion	–	–	–	–	–	–	–
Inactive							
Inactive Primary lesion . .	5	4	9	8	–	1	–
Inactive post-primary lesion	2	3	5	1	4	–	–
Total . .	8	9	17	9	4	1	3

In addition 321 boys and 259 girls were X-rayed with the miniature X-ray apparatus at the Authority's Central Health Clinic. Four children were recalled for large films with the following results :—

1 N.A.D.
1 Pulmonary conus slightly enlarged.
1 Mitral enlargement.
1 Lungs N.A.D. but heart is mitral in appearance.

A special investigation of one school was made where there had been a case of tuberculosis, and 81 children and 2 teachers were X-rayed. No symptoms were found in any child and no large films were required.

WORK OF THE SCHOOL DOCTORS

A. L. S.

It has been thought of some interest to make a sample analysis of the work of the school medical officers during a representative period of four weeks of the year during which work was possible at all times in the schools. The result is given in the form of a table appended. It will be seen that medical inspection in schools, which is still the prime function of the School Health Service, accounts for 30·6% of the time devoted by whole-time and part-time doctors to the service. In the table the figures refer to the number of sessions given to the items enumerated, and full-time and part-time medical officers are shown separately. The minor ailment clinic sessions occupy a position second to medical inspections in schools. It will be seen from the total figures given elsewhere in the report of attendances at clinics, that there is a tendency for the demand on the minor ailment service to diminish. It is possible that it will diminish even further in the future with the decline in virulence of some of the organisms, the additional facilities that parents have from general practitioners, and something of a change of heart of the general practitioners themselves for the health and ailments of children. It is common knowledge that a few general practitioners have now started their own ' well child ' clinics.

Although the Authority employs a whole-time dental anaesthetist and has assistance from consultant and other anaesthetists for this purpose, the school medical officers are employed to the extent of 24 sessions per month (5·4% of their S.H.S. time). The figures of dental anaesthetic sessions given in the table include 44 sessions given by the full-time dental anaesthetist. The total represents provision for about eight dental surgeons. This is rather more than would otherwise be necessary owing to the fact that we have not sufficient dental staff to carry out all the conservative dentistry that we would like. The assessment of the handicapped child forms an important part of the function of the school medical officer and 5·4% of the time was devoted to this purpose. In the other occupations of the school medical officer are sessions devoted to special enuretic clinics, Tb contact clinics, sessions for the examination of employees for superannuation purposes, and so on. One medical officer is employed as a clinical assistant at the Child Guidance Clinic for three sessions per week, and another is employed as a clinical assistant at the Children's Hospital on one session per week. A further medical officer attends for one session per week at the Children's Hospital as part of the cerebral palsy assessment team. The total of these other activities is 90 sessions out of 370, which forms a considerable proportion of the total work of the school doctor. It is felt that this side of the work is an important one in that it gives a wider interest to the school medical officers and the possibility of developing that interest.

	Whole time M.O's. Sessions	*Part time M.O's. Sessions*
Medical Inspections in Schools (including Special School Inspections)	110	26
Minor Ailment Clinic Inspection	78	30
Dental Anaesthetics	68	18
E.S.N. Assessment	24	–
Other Duties	90	–
	370	74

YOUTH EMPLOYMENT DEPARTMENT

The Employment of Handicapped Children

B. M. Dyer.

Some months prior to leaving school all boys and girls and their parents are made aware of the facilities offered by the Youth Employment Department. General talks are given to the children in schools, and evening meetings are held for the parents. Later, in the leaving term, the children are interviewed, with the parents and Heads of schools present, to give them individual advice and help in getting suitable employment.

Confidential reports on educational attainment, general ability, and aptitude are supplied by the Heads of schools and these are combined with a medical report supplied by the School Health Department which indicates the type of work for which the child would be physically unfit. Great importance is attached to these reports and frequently further reference is made to the School Health Department so that close liaison has been built up.

The aim of vocational guidance is to direct the young worker into employment where he can make best use of his abilities and aptitudes, and where he has a good chance of success. This is of prime importance in placing the handicapped who are often less mature and confident than other children. For each child the range of choice is limited, particularly where there is mental disability combined with a physical one. This means that the handicapped child often cannot be placed immediately into employment on leaving school, as the right kind of opening is not always available. The specialist officer dealing with these children spends much time in getting to know them, looking for the right vacancy, and interviewing them regularly to keep up their morale and interest in getting work.

Despite the general hardening of the employment situation during the last year, there has been no difficulty in placing disabled youngsters who are intelligent. Their range of possibilities is greater and employers are sympathetic to them. They enter all kinds of trades and occupations according to their interests and aptitudes. The less intelligent who are not barred from working with machinery can also be settled soon in factories, warehouses, building, etc. The remainder offer problems to which there is not always an answer.

The substantially handicapped child is advised to register under the Disabled Persons (Employment) Act, so he may get the benefit which it provides and also to ensure the attention of a specialist officer at the Employment Exchanges if he should need help after attaining the age of 18 years.

Those few boys and girls who are difficult to settle into work immediately on leaving school are advised to apply for the Ministry of Labour rehabilitation course, where a better adjustment to industrial conditions is made. During the year one boy from Russell Town Special School for E.S.N. boys, two from Novers Hill Open Air School, a boy from a Secondary Modern School, a girl from Croydon Hall Residential Special School for E.S.N. girls, and a girl from a private residential school were accepted in this way. In addition to these, nine older boys and eight older girls attended the course, as they had not settled down after trying several jobs, or needed rehabilitating after hospital in-patient treatment. One girl—a severe epileptic—was not accepted for the course.

An innovation was for the Youth Employment Officer to visit Marlborough House Occupation Centre to interview boys and girls who had become sixteen, to see if they had any employment potential at all. As a result of this, five high-grade boys were put forward for the rehabilitation course. One boy was rejected as being unsuitable, and the courses of three others were terminated prematurely as they did not make the progress which was expected. The other boy was soon placed into employment after the course.

Vocational training courses provided by the Ministry of Labour are now only open to disabled youngsters under special circumstances. However, one boy was accepted for an engineering course and two girls were accepted for commercial courses.

Three applications were made for employment at the Remploy Factory, but only one girl was interviewed, and she was rejected as it was found that she would be unable to do the work available. Finding an occupation for the severely handicapped person who is incapable of open competitive employment, but not of low enough mental level to attend the Occupation Centre, still presents a problem as there is almost no provision of sheltered employment for juveniles. Happily, the number of these cases is very small indeed.

After-Care of Handicapped Children

Ella P. Young.

The after-care service has become more widely known during its second year and the number of boys and girls under supervision has increased beyond original expectations. 201 boys and girls are now receiving routine visits ; of these, 81 are physically handicapped and 120 are educationally sub-normal. 95 of the total attended special schools. Most of the boys and girls visited during the first 3 months of the scheme will not be seen again as the size of the case load precludes following up young people over the age of 18 or 19 except under special circumstances. 22 cases have been closed, 8 of these are physically handicapped and 8 educationally sub-normal. Of the remainder, 4 have been referred to the Mental Health Department, 1 has been sent to Approved School and 1 is now on Probation.

The majority of these boys and girls are working and have fairly well organised leisure time. The minority, usually about 20. to 30 at one time, require more frequent contact and case work with them takes up the greater part of the officer's time. Therefore, in order to maintain certain standards in case work the number of routine visits has had to be reduced, and children who have settled in employment and are making a good adjustment to ordinary social life among non-handicapped people receive visits every few months only. The disadvantage of this is that they may meet crises or drift into difficulties without the knowledge of the Aftercare Officer. The routine visit increases the officer's knowledge of the family and the locality, and helps to build a picture of the day to day life of the boys and girls in whom she is interested. The value of knowing something of the social relationships of the child, his friends, of the family and the neighbourhood cannot be over-estimated. For example :—

June, a difficult and backward asthmatic, is looking for a second job. Her first one lasted 3 weeks and she has lost confidence about getting another. Employers are put off by her odd appearance—she is a quaint-looking child with poor eyesight and rather unco-ordinated gait. June's chief disadvantage, however, is her feeling of inferiority, and it seems that the reasons for this may lie partly in the family situation. Her father appears resentful of her and the family are not well accepted in their neighbourhood. June has never made friends and has had a succession of failures at school and at home. Although the circumstances may not be altered, the situation can be eased a little for June if the parents, who are anxious for her to earn her own living, can be persuaded to have a little more confidence in her. She has already helped herself by joining a small social group and is delighted with her success in this.

The fate of the physically handicapped child continues to depend, apparently, on other factors as well as the type and degree of disease and loss of function. The example of so many well known people who have overcome considerable physical handicaps to live independently in ordinary communities can be an incentive to the child whose family have regarded him from infancy as a " wonderful little sufferer ". It is often surprising how vigorously the physically handicapped child throws off solicitude when he discovers the advantages of going out to work like other people and leading a normal social life.

The After-care Officer is concerned only with the child who has left school, and must therefore work with parents whose conception of their child's handicap is already formed and may be hard to modify. Once the child has proved how much he can do within his limitations and the parents have accepted this and are happy about it, there seems little need to pursue the case any further, unless the condition is progressive or the child is also dull or insecure. Continued interest when help is no longer needed may only emphasize the difference between the child and his normal siblings. In several cases where medical check-ups are a necessary precaution, parents have interpreted this as meaning that the child is still receiving treatment.

James left a special school in the Summer extremely keen to start work. He had severe illness as a child, did not learn to speak until he was 11 and also had fits. His educational attainments were low but his bright and pleasant manner and good appearance were in his favour. The Youth Employment Office arranged for James to go to the Industrial Rehabilitation Unit on leaving school, mainly to accustom him to working conditions, to assess his capabilities and to help him speed up. He enjoyed the 12 weeks course and received an encouraging report suggesting that he should find a fairly light job in which his manual skill would be used. James had many unsuccessful interviews at first and it was discovered that he tended to enlarge upon his medical history, thus putting off employers. Finally the Aftercare Officer accompanied James to interviews and after several months he got a job in which he is very happy. Much of his difficulty centred round his mother's attitude. She dwelt on his past illness and would not accept his improved health. Several times she refused suggestions about jobs, always on the grounds of James' health or else that the job had no prospects. When the After-care Officer visited her after he started work Mrs. S. broke down and it was obvious how much strain she had been under. Despite her gratitude it is quite likely that she will disturb James later, and that he will have several changes of job before she is convinced that he can be independent of her.

BRISTOL EDUCATION COMMITTEE

Chairman - -	Alderman R. St. John Reade, M.A.
Vice-Chairman -	Councillor Mrs. F. M. Brown.

Special Services Committee

Chairman - -	Councillor Mrs. F. M. Brown.

Chief Education Officer

G. H. Sylvester, M.A.

Principal School Medical Officer and Medical Officer of Health

R. H. Parry, M.D., F.R.C.P., D.P.H.

Deputy Principal School Medical Officer and Deputy Medical Officer of Health

R. C. Wofinden, M.D., D.P.H., D.P.A.

Senior Medical Officer School Health Service

A. L. Smallwood, M.D., D.C.H., D.P.H.

CITY AND COUNTY OF BRISTOL

Population (estimated mid-1953)	444,200
Schools :—	
Number of School Departments	194
Average Number on Registers	62,182
Average Attendance	55,360

SCHOOL CLINICS

Name of Clinic	*Address*	*Clinics Held*
Central Health Clinic.	Tower Hill, Bristol 2. Tel. 26602.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic, Orthopaedic, Aural and Dermatological Consultant Clinics, Chiropody Clinic, Enuretic Clinic, Artificial Sunlight Clinic, Tb Contact Clinic.
Bedminster Health Centre.	Wedmore Vale Bristol 3. Tel. 63798	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic and Aural Consultant Clinics.
Granby House Clinic.	St. John's Road, Bedminster. Tel. 64443.	Minor Ailment Inspection and Treatment.
Speedwell Health Centre.	Whitefield Road, Speedwell, Bristol 5. Tel. 73194.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic and Aural Consultant Clinics.
Portway Health Centre.	Shirehampton, Bristol. Tel. Avonm'th 90.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic and Aural Consultant Clinics.
Southmead Health Centre.	Monks Park Ave., Southmead, Bristol. Tel. 66414.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment. Ophthalmic and Aural Consultant Clinics.
Brooklea Clinic.	Wick Road, Brislington. Tel. 78861.	Minor Ailment Inspection and Treatment. Dental Inspection and Treatment.
Knowle Health Centre.	Broadfield Road, Bristol 4. Tel. 76292.	Minor Ailment Inspection and Treatment.
Connaught Road School Clinic.	Connaught Road School, Bristol 4.	Minor Ailment Treatment.
Verrier Road Clinic.	Verrier Road, Redfield. Tel. 56387.	Minor Ailment Treatment.
Child Guidance Clinic.	7 Brunswick Sq., Bristol 2. Tel. 26181.	
Speech Clinics.	1 Argyle Road, St. Paul's, Bristol 2. Tel. 26760 and Knowle Health Centre.	

STAFF

Principal School Medical Officer and Medical Officer of Health

R. H. PARRY, M.D., F.R.C.P., D.P.H.

Deputy Principal School Medical Officer and Deputy Medical Officer of Health

R. C. WOFINDEN, M.D., D.P.H., D.P.A.

Senior Medical Officer School Health Service

A. L. SMALLWOOD, M.D., D.C.H., D.P.H.

School Medical Officers

(Joint Appointments with the Local Health Authority)

Mrs. Monica A. Pauli, M.B., Ch.B., B.A.O.
R. J. Irving Bell, M.R.C.S., L.R.C.P., D.P.H.
Mary Gibson, M.B., Ch.B., D.P.H.
A. M. Fraser, L.R.C.P., L.R.C.S., D.P.H.
B. J. Boulton, M.B., Ch.B.
Clara Jahoda, M.D. (Vienna)
Helen M. Gibb, M.B., Ch.B., D.P.H.
J. E. Kaye, Med. Dip. (Warsaw), D.P.H.
S. W. Terry, M.B., B.S., D.T.M.& H., D.P.H.
J. L. S. James, M.R.C.S., L.R.C.P. (Anaesthetist)
Kathleen E. Faulkner, M.B., Ch.B., D.Ch., D.P.H. (from 12/10/53).

Part-time School Medical Officers

H. F. M. Finzel, M.D., B.S., M.R.C.S., L.R.C.P.
C. Jean Fraser, M.B., Ch.B., D.P.H.

Consultants—Part-time

Ear, Nose and Throat Clinic -	G. R. Scarff, M.B., Ch.B., F.R.C.S.(E.) H. D. Fairman, F.R.C.S.
Orthopaedic Clinic - - -	K. H. Pridie, M.B., B.S., F.R.C.S. D. M. Jones, M.B., B.S., F.R.C.S., M.Ch. (Orth.)
Ophthalmic Clinic - - -	R. R. Garden, M.A., M.B., D.O.M.S., D.P.H.
Cardio-rheumatic Clinic - -	C. Bruce Perry, M.D., F.R.C.P.
Dermatological Clinic - -	R. P. Warin, M.D., M.R.C.P. C. D. Evans, B.A., M.B., B.Ch. (Camb.)
Chiropody Clinic - - -	L. I. W. Tasker, M.Ch.S.

Dental Surgeons

Principal School Dental Officer	W. H. B. Stride, L.D.S.
School Dental Officers	A. L. Morgan, L.D.S. (to 9/11/53)
	Mrs. Marion Bentz, L.D.S.
	A. H. V. Williams, L.D.S.
	H. W. Williams, L.D.S.
	Alice M. Trump, L.D.S.
	Helena Blinkworth, L.D.S.
	R. D. Hepburn, L.D.S.
	G. W. Vowles, L.D.S. (part-time)
	H. Hazell, L.D.S. (part-time)

(There were four vacancies on the dental staff at the end of the year)

Oral Hygienist	Jean E. Wells

Child Guidance Clinic

Director	R. F. Barbour, M.A., F.R.C.P., D.P.M.
Assistant Psychiatrist	Mrs. Doris E. Heron, M.R.C.S., L.R.C.P.
Senior Registrar (Psychiatry)	W. L. Walker, M.B., Ch.B., D.P.H., D.P.M.*
Senior Psychologist	R. V. Saunders, M.A., B.Ed.
Psychologists	Pamela Regan, B.Sc.
	Mrs. J. Vant, B.A. (to 31/8/53)
	C. J. Beedell, B.Sc.
	Eleanor J. Horn, M.A. Dip. Ed. (from 1/9/53)
Senior Psychiatric Social Worker	Mrs. L. Gatliff.
Temporary Social Worker	Mrs. J. Page

Speech Clinic

Speech Therapists	Kathleen Coleman, L.C.S.T.
	Gloria V. Steer, L.C.S.T.

Nursing Service

Chief Nursing Officer	Miss L. M. Bendall, S.R.N., S.C.M., H.V.Cert.
Deputy Chief Nursing Officer	Miss V. P. Bowler, S.R.N., S.C.M., H.V.Cert.

* Appointed by Regional Hospital Board.

Persons other than those whose names appear in the list of staff who have contributed to this report are the following :—

H. Bingham, *Superintendent Welfare Officer.*
Miss E. E. Mawson, M.D., *Medical Officer-in-Charge, Mass Radiography Unit.*
Miss T. B. Hetherington, *Chief Organiser of School Meals.*
F. J. Redstone, F.R.San.I., F.S.I.A., *Chief Sanitary Inspector.*
J. MacA. Milne, *Chief Organiser of Physical Education.*
Miss C. E. Cooke, *Senior Woman Organiser of Physical Education.*
L. S. F. Bone, *Head of South Bristol Open-Air School.*
B. M. Dyer, B.A., *Youth Employment Officer.*
Mrs. E. P. Young, *After-Care Officer for Handicapped Children.*
Mrs. Grace Woods, M.B., B.S., D.P.H., *Medical Officer, Cerebral Palsy Assessment Clinic.*
D. M. Evans, B.A., *Personal Assistant to Medical Officer of Health.*

The following staff changes took place during the year :—

Medical

Dr. Norah E. Archer, M.A., D.M., D.P.H., was appointed on 1st April, 1953, to one of the vacant posts on the full-time joint medical staff. Dr. Archer, however, resigned her appointment on 30th September and Dr. Kathleen E. Faulkner, M.B., Ch.B., D.C.H., D.P.H., was appointed from 12th October, 1953, to fill the vacancy.

Dental

It is with regret that we have to record the death of Mr. A. L. Morgan, L.D.S., on 9th November, 1953.

Up to the end of the year it had not been possible to appoint a full-time dentist in his place but engagements of part-time dentists were made to replace a certain number of sessions.

Child Guidance Clinic

Mrs. J. Vant, B.A., resigned her appointment as assistant educational psychologist on 31st August, 1953.

Miss Eleanor J. Horn, M.A., Dip. Ed., was appointed from 1st September, 1953, in her place.

Dr. W. Lumsden Walker, M.B., Ch.B., D.P.H., D.P.M., was appointed by the South Western Regional Hospital Board as Senior Registrar on 10th September, 1953, and gives six sessions per week at the Child Guidance Clinic.

STATISTICAL TABLES

YEAR ENDED 31st DECEMBER, 1953

Table I. MEDICAL INSPECTION OF PUPILS ATTENDING MAINTAINED PRIMARY AND SECONDARY SCHOOLS

(including special schools)

A.—PERIODIC MEDICAL INSPECTIONS

1952		1953
	Number of Inspections in the prescribed Groups :—	
6,896	Entrants	**6,022**
4,814	Second Age Group	**3,553**
4,387	Third Age Group	**4,234**
16,097	Total	**13,809**
1,428	Number of other Periodic Inspections	**1,263**
17,525	Grand Total	**15,072**

B.—OTHER INSPECTIONS

28,823	Number of Special Inspections	**24,360**
30,917	Number of Re-inspections	**29,563**
59,740	Total	**53,923**

C.—PUPILS FOUND TO REQUIRE TREATMENT

Number of Individual Pupils Found at Periodic Medical Inspection to Require Treatment

(Excluding Dental Diseases and Infestation with Vermin)

1952				1953		
For Def. Vision*	For any other condn.	Total Individ. pupils.		For Def. Vision*	For any other condn.	Total Individ. pupils.
56	546	598	Entrants	**48**	**477**	**519**
134	294	419	Second age group	**98**	**176**	**268**
136	160	290	Third age group	**147**	**147**	**295**
326	1,000	1,307	Total (prescribed groups)	**293**	**800**	**1,082**
74	66	137	Other Periodic Inspections	**36**	**69**	**101**
400	1,066	1,444	Grand Total	**329**	**869**	**1,183**

* Excluding Squint.

Table II

A.—RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION

1952					1953			
Periodic Inspections		Special Inspections			Periodic Inspections		Special Inspections	
No. of Defects		*No. of Defects*			*No. of Defects*		*No. of Defects*	
Req. treatment	Req. obs. but not treatment	Req. treatment	Req. obs. but not treatment		Req. treatment	Req. obs. but not treatment	Req. treatment	Req. obs. but not treatment
77	34	3,215	79	Skin	53	40	3,318	88
400	89	973	151	Eyes—(*a*) Vision ..	329	55	1,108	125
38	42	35	14	(*b*) Squint ..	31	33	39	23
8	30	937	42	(*c*) Other ..	9	17	863	40
23	32	94	16	Ears—(*a*) Hearing ..	13	29	72	27
13	19	292	8	(*b*) Otitis Media	23	18	232	12
1	8	556	30	(*c*) Other ..	1	6	423	17
234	566	964	252	Nose or Throat.. ..	188	453	1,048	294
37	49	43	27	Speech	34	40	40	33
50	220	82	56	Cervical Glands.. ..	24	140	59	66
29	91	45	61	Heart and Circulation ..	11	64	11	88
106	234	334	174	Lungs	104	200	248	207
				Developmental—				
—	1	1	1	(*a*) Hernia	4	1	2	—
1	—	4	1	(*b*) Other	—	—	10	3
				Orthopaedic—				
21	57	25	35	(*a*) Posture	14	39	16	38
20	29	23	12	(*b*) Flat Foot ..	14	17	54	20
103	158	208	67	(*c*) Other	102	149	187	124
				Nervous System—				
2	10	3	25	(*a*) Epilepsy	—	2	2	1
4	69	24	51	(*b*) Other	4	54	37	49
				Psychological—				
12	9	18	12	(*a*) Development ..	9	7	20	20
—	3	7	1	(*b*) Stability	—	—	11	3
637	522	9,464	830	(*c*) Other	447	410	7,914	699

B.—CLASSIFICATION OF THE GENERAL CONDITION OF PUPILS INSPECTED DURING THE YEAR IN THE AGE GROUPS

1 Age Groups	2 No. of Pupils Inspected	A (Good)		B (Fair)		C (Poor)	
		No.	% of col. 2	No.	% of col. 2	No.	% of col. 2
Entrants	6,022	3,363	55·85	2,493	41·40	166	2·75
Second Age Group ..	3,553	1,978	55·67	1,513	42·58	62	1·75
Third Age Group	4,234	2,160	51·02	2,026	47·85	48	1·13
Other Periodic Inspections..	1,263	626	49·56	618	48·93	19	1·51
TOTAL	**15,072**	**8,127**	**53·92**	**6,650**	**44·12**	**295**	**1·96**
1952 TOTAL	17,525	8,603	49·09	8,421	48·05	501	2·86

Table III. INFESTATION WITH VERMIN

1952		1953
168,786	(*i*) Total number of examinations in the Schools by the school nurses or other authorised persons	183,574
2,674	(*ii*) Total number of invididual pupils found to be infested ..	2,990
234	(*iii*) Number of individual pupils in respect of whom cleansing notices were issued (Section 54 (2), Education Act, 1944) ..	248
76	(*iv*) Number of individual pupils in respect of whom cleansing orders were issued (Section 54 (3), Education Act, 1944) ..	123

Table IV

TREATMENT OF PUPILS ATTENDING MAINTAINED PRIMARY AND SECONDARY SCHOOLS (INCLUDING SPECIAL SCHOOLS)

Group I—Diseases of the Skin

No. of Cases treated or under treatment during the year 1952			No. of Cases treated or under treatment during the year **1953**	
by the Authority	Otherwise		by the Authority	Otherwise
—	48	Ringworm— (i) Scalp	—	23
194	2	Ringworm—(ii) Body	309	1
120	2	Scabies	82	—
488	4	Impetigo	562	7
2,699	147	Other Skin Diseases	2,952	161
3,501	203	Total	3,905	192

Group 2—Eye Diseases, Defective Vision and Squint

No. of Cases dealt with 1952			No. of Cases dealt with **1953**	
by the Authority	Otherwise		by the Authority	Otherwise
1,673	—	External and other, excluding errors of refraction and squint	1,404	—
731	4,759	Errors of Refraction (including squint)	1,301	3,219
2,404	4,759	Total	2,705	3,219
		Number of pupils for whom spectacles were		
282	2,078	(*a*) Prescribed	649	1,532
240	1,970	(*b*) Obtained	396	1,454

Group 3—Diseases and Defects of Ear, Nose and Throat

No. of Cases treated 1952			No. of Cases treated **1953**	
by the Authority	Otherwise		by the Authority	Otherwise
		Received operative treatment		
—	36	(*a*) for diseases of the ear	—	35
—	1,812	(*b*) For adenoids and chronic tonsillitis	—	1,583
—	305	(*c*) for other nose and throat conditions	—	147
1,147	64	Received other forms of treatment ..	803	117
1,147	2,217	Total	803	1,882

Group 4—Orthopaedic and Postural Defects

1952			1953	
by the Authority	Otherwise		by the Authority	Otherwise
209		(*a*) Number treated as in-patients in hospitals	**207**	
339	182	(*b*) Number treated otherwise, e.g., in clinics or out-patient departments	**299**	**175**

Group 5—Child Guidance Treatment

1952			1953	
Number of cases treated			Number of cases treated	
In the Authority's Child Guidance Clinics	Elsewhere		In the Authority's Child Guidance Clinics	Elsewhere
326	79	Number of pupils treated at Child Guidance clinics ..	**315**	**56**

In addition 211 cases carried over from 1952 were seen during the year.

Group 6—Speech Therapy

1952			1954	
Number of cases treated			Number of cases treated	
by the Authority	Otherwise		by the Authority	Otherwise
256	1	Number of pupils treated by Speech Therapists	**310**	**1**

Group 7—Other Treatment Given

1952			1953	
Number of cases treated			Number of cases treated	
by the Authority	Otherwise		by the Authority	Otherwise
18,443	160	(*a*) Miscellaneous minor ailments ..	**14,735**	**239**
		(*b*) Other (specify)		
827	—	(1) Chiropody Clinic	**881**	—
565	22	(2) Ultra Violet Light Clinic ..	**428**	**32**
378	—	(3) Enuretic Clinic	**298**	—
545	—	(4) T.B. Contact Clinic	**596**	—
228	—	(5) Skin Consultant Clinic ..	**211**	—
20,986	182	Total	**17,149**	**271**

Table V

DENTAL INSPECTION & TREATMENT CARRIED OUT BY THE AUTHORITY

1952		1953
	(1) Number of pupils inspected by the Authority's Dental Officers	
36,059	(*a*) Periodic	40,917
5,632	(*b*) Specials	5,464
41,691	Total (1)	46,381
28,442	(2) Number found to require treatment	32,691
28,299	(3) Number referred for treatment	32,379
23,553	(4) Number actually treated	23,759
36,002	(5) Attendances made by pupils for treatment	39,048
277	(6) Half-days devoted to—Inspection	313
*3,332	—Treatment	3,352*
3,609	Total (6)	3,665
11,558	(7) Fillings—Permanent Teeth	13,238
755	—Temporary Teeth	1,082
12,313	Total (7)	14,320
10,725	(8) Number of teeth filled—Permanent Teeth	12,038
742	—Temporary Teeth	1,055
11,467	Total (8)	13,093
4,850	(9) Extractions—Permanent Teeth	5,727
22,470	—Temporary Teeth	25,164
27,320	Total (9)	30,891
15,244	(10) Administration of general anaesthetics for extraction	15,772
6,178	(11) Other operations—Permanent Teeth	8,295
7,699	—Temporary Teeth	8,465
13,877	Total (11)	16,760

*207 * This figure includes sessions by the Oral Hygienist. *441

In addition 327 sessions were given to the treatment of mothers and young children.

SUMMARY OF WORK DONE DURING THE YEAR

1952		1953
	School Medical Officers :—	
1,029	No. of Visits to Schools for Periodic Inspection	971
17,525	No. of Children Examined at Periodic Inspection in Schools	15,072
2,647	No. of Re-examinations in Schools	3,660
919	No. of Special Inspections	646
	Dental Surgeons :—	
36,059	No. of Children Examined—Periodic Inspections	40,917
5,632	—Special Inspections	5,464
23,553	No. of Children Treated	23,759
	School Nurses :—	
	Cleanliness Survey	
3,457	No. of Visits to Schools	3,269
168,786	No. of Examinations of Children	183,574
1,826	No. of Homes visited for uncleanliness	1,954
3,121	No. of Homes visited for " following-up," etc.	3,334
	Preparation for Medical Inspection	
1,029	No. of Visits to Schools	955
18,197	No. of children prepared	17,336

SCHOOL CLINICS

1952			1953
No. of Attendances		*Work*	*No. of Attendances*
48,532	Central Health Clinic	Inspection clinic ; treatment of minor ailments ; ear, nose and throat clinic ; skin clinic ; dental treatment ; orthodontic treatment ; refraction clinic ; asthma clinic ; enuretic clinic ; T.B. contact clinic ; treatment of scabies cases ; orthopaedic clinic ; remedial exercises ; electrical treatment ; physiotherapy ; massage and foot treatment.	**45,474**
6,993	Brislington Clinic	Inspection clinic ; treatment of minor ailments	**6,227**
29,456	Bedminster Health Centre	Inspection clinic ; treatment of minor ailments ; ear, nose and throat clinic ; dental treatment and refraction clinic	**28,165**
—	Wm. Budd Health Centre		**2,117**
5,847	South Bristol Baths Clinic	Treatment of minor ailments	**4,662**
8,802	Knowle Casualty Station	Treatment of minor ailments	—
14,141	Broadfield Road Clinic	Inspection clinic ; treatment of minor ailments	**13,200**
29,007	Speedwell Health Centre	Inspection clinic ; treatment of minor ailments ; ear, nose and throat clinic ; dental treatment and refraction clinic	**26,605**
4,248	Verrier Road Clinic	Treatment of minor ailments	**3,429**
18,773	Portway Clinic	Inspection clinic ; treatment of minor ailments ; ear, nose and throat clinic; dental treatment and refraction clinic	**20,834**
25,117	Southmead Clinic	Inspection clinic ; treatment of minor ailments ; ear, nose and throat clinic ; dental treatment, and refraction clinic	**26,256**
21,886	Connaught Road School Clinic	Treatment of minor ailments	**12,875**
1,156	Day E.S.N. Special Schools	Treatment of minor ailments	**992**
13,576	Novers Open Air School	Remedial exercises and massage ; treatment of minor ailments	**13,478**
1,055	Cardio-rheumatic Clinic	Cases of heart disease and acute rheumatic infection	**928**
6,484	Artificial Light Clinic	Cases of anaemia and debility	**4,747**
1,888	Child Guidance Clinic		**2,486**
3,733	Speech Clinics		**3,461**
1,091	Dental Hospital		**1,210**
241,785	Total Attendances		**217,146**

SCHOOL NURSES

1952		1953
	Following is a summary of the Nurses' Survey for the year :—	
3,030	No. of sessions	**3,154**
101,701	No. of children surveyed	**104,681**
3,788	No. with defects	**4,053**
	Of the cases with defects :—	
2,581	No. referred to Doctor	**2,990**
490	No. referred to Doctor for Eye Specialist	**358**
492	Minor Ailments referred for treatment	**456**
213	Will attend own doctor or Hospital	**240**
12	Refusals	**9**
3,457	Total number of visits to schools in respect of verminous condition and general examination during the year	**3,629**
168,786	Total number of examinations made	**183,574**
1,325	Number of re-examinations (included in above total)	**2,561**

Sunlight Clinic

During 1953, 398 children of school age and 32 children at nursery schools were given a complete course of artificial sunlight treatment. Details of the cases are given below :

Defect	Prim. Secy. and Gram. Schools.			Nursery Schools.		
	No. Treated	Im-proved	Station-ary	No. Treated	Im-proved	Station-ary
General Debility	82	65	17	9	7	2
Bronchitis—moderate	35	25	10	7	4	3
Bronchitis—slight	21	19	2	2	2	–
Enlarged glands	20	16	4	1	1	–
Malnutrition	27	22	5	2	2	–
Miscellaneous	213	154	59	11	8	3
Total	398	301	97	32	24	8